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AUTHOR Halpern, Robert; Fisk, David
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ABSTRACT

This report records survey results of preschool education programs serving children ages 3 through 6 and their families in Bolivia, Chile, and Colombia. Programs surveyed were primarily designed to reach the poorest sectors of the population, focused on improving the young child's psychomotor and social development, and utilized various educational intervention techniques in the home or center to provide services. The central objectives of the survey were to describe from a public policy perspective the major preschool education activities in the host countries; to document the nature, objectives, and central variables constituting the "decision rules" governing program implementation; to analyze the implications of these objectives and decision rules; and to formulate testable assertions and/or suggested program guidelines for early education programs in developing countries. Among 10 policy questions stated were: Whom should programs be serving? How can the full range of children's basic needs be met? How should the role of parents be defined? and, what should be the nature and extent of intersectional cooperation in early childhood education? Attachments include a list of variables identified as influential in decision making in early childhood education in Latin America. An annotated bibliography is also provided. (Author/DB)

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Preschool Education in Latin America

A Survey Report from the Andean Region

Summary Report

PS 012384

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PRESCHOOL EDUCATION IN LATIN AMERICA

- A SURVEY REPORT FROM THE ANDEAN REGION -

Volume I:

Summary Report

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600 North River Street
Ypsilanti, Michigan 48197

- 1978 -

This report is the first volume of a four volume series on preschool education in Latin America. The complete series is as follows:

I. Preschool Education in Latin America: A Summary Report

II. Antecedentes Generales Sobre la Educación Preescolar en Bolivia

III. Antecedentes Generales Sobre la Educación Preescolar en Chile

IV. Antecedentes Generales Sobre la Educación Preescolar en Colombia

Volume I is available in Spanish and English, volumes II, III and IV are available in the Spanish language originals only.

This report reflects the result of a collaborative international survey effort coordinated by:

High/Scope Educational Research Foundation
Ypsilanti, Michigan

David P. Weikart, Ph.D. Project Monitor
David D. Fisk, Project Director
Judith Evans, Ph.D. and Robert Halpern, Ph.D.,
Technical Advisors

with the collaboration of the following Latin American educational research and development groups:

Centro Boliviano de Investigación y Acción Educativa (CEBIAE) of La Paz, Bolivia
Lic. José Subirats, Principal Investigator

Centro de Investigación y Desarrollo de la Educación (CIDE) of Santiago, Chile
Lic. Johanna Filp, Principal Investigator

Centro para el Desarrollo de la Educación No-Formal (CEDEN) of Bogotá, Colombia
Benjamín Alvarez, Ph.D. and Martha Lucía M. de Lombana, Principal Investigators.

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David P. Scherer, Ph. D., Sub-contract Officer
Ms. Rebecca Snyder and Mr. George Jessen,
Project Consultants

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Mr. Kenneth C. Martin, Project Officer
Ms. Charlotte Jones, Education Economics Consultant

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Acknowledgments

Institutional capability and professional competence in the private social development sector is an especially valuable resource in developing countries. There are many urgent problems to be addressed and increasing support is available to those domestic organizations that have a demonstrated ability to do something about the problems in their countries.

The Latin American groups and individuals who participated in this survey are a good example of this very competent and very busy institutional and professional capability. They are constantly faced with making difficult choices as to resource allocation. We are aware of the implications of this on their decision to dedicate time and resources -far beyond contractual obligations- to this task. We are grateful for their support in this effort.

- The High/Scope project team

INTRODUCTION

Summary Description

This report records the results of a survey of education programs serving pre-primary school-aged children and their families in Bolivia, Chile and Colombia. The scope of work for this survey included those programs which

- serve the 3-6 year old child and his family
- were primarily designed to reach the poorest sectors of the population
- have an explicit educational component central to program design which attempts to improve the psychomotor and social development of the young child, although there may also be (and generally are) other corollary service components serving basic needs in such areas as nutrition and health
- utilize formal or non-formal education intervention techniques, are home or center-based, and are experimental or service-oriented in nature.

Programs that serve the 0-3 year old poor population or do not have an explicit early childhood education component as central to program design are referred to only marginally in this report.

...the problem of development must be defined as a selective attack on the worst forms of poverty. Development goals must be defined in terms of progressive reduction and eventual elimination of malnutrition, disease, illiteracy, squalor, unemployment, and inequalities. We are taught to take care of our GNP, because this would take care of poverty. Let us reverse this and take care of poverty, because this will take care of GNP.

Mahbub ul Haq, Staff
member of the World Bank

I. Introduction

The central objectives of the survey were to:

- Describe, from a public policy perspective, the major preschool education activities in the host countries.
- Document the nature, the objectives and the central variables constituting the "decision rules" governing program implementation.
- Analyze the implications of these objectives and decision rules and, on the basis of this analysis, formulate testable assertions and/or suggested program guidelines for early education programs in developing countries.

The survey was a collaborative effort of the High/Scope Educational Research Foundation and selected counterpart agencies in the three participating countries. The counterpart agency and principal investigator in each of the three participating countries were:

- In Bolivia, the Centro Boliviano de Investigaciones de Acción Educativa (CEBIAE) with the Center's director Lic. José Subirats as principal investigator.
- In Chile, the Centro de Investigación y Desarrollo de la Educación (CIDE) with Lic. Johanna Filp as principal investigator.
- In Colombia, the Centro para el Desarrollo de la Educación No-Formal (CEDEN) with Dr. Benjamín Alvarez and Martha Lucia M. de Lombana as principal investigators.

The study was based on existing program data available to these professionals in the participating countries and took into account prior survey work on this topic. The basic mechanisms for gathering data were a literature review and interviews with policy makers and program implementors in the host countries. Personnel in the field and home offices of selected public and private international agencies supporting human resource development efforts were also interviewed.

Financial support for the study was provided by the Agency for International Development (AID) under an agreement with the Cooperative Educational Service Agency - 12 (CESA-12) of Portage, Wisconsin.

The countries of Bolivia, Chile, Colombia and Perú were originally proposed as project sites because they represent a good cross-section in the spectrum of early childhood development programming in the LDC's. Chile has a history of some 30 years of strong and growing involvement in preschool education, Bolivia has been in an on-again, off-again posture for an equal period of

time, and Perú was in the first stages of implementating what is projected to be a massive "full cover" program.

There are also interesting contrasts in the way official policy reflects the purpose of preschool education in the different countries. This ranges from the strong "process" orientation reflected in the Peruvian educational reform to the "outcome" orientation found in varying degrees in the other three countries. There are also a variety of constraints in the different settings. Colombia, through Law Nº 27, apparently has the financial capability for massive programming, but is facing critical institutional and personnel needs; Chile has institutional and personnel resources but is captive of a stringent financial reality; Perú and Colombia are somewhere in between.

Agreements were successfully negotiated with organizations in Bolivia, Chile and Colombia. The Ministry of Education in Lima, however, requested that Perú not be included in this project.[1]

Background

There is a growing awareness among Latin American development planners of the possible significance and relevance of research data from their own countries and elsewhere demonstrating the decisive influence of the earliest years of life on later human development. This is having an impact on human resource development intervention programs in a variety of areas. For example, commodities channeled under public feeding programs are shifting from family feeding to the pregnant mother and her infant child. Maternal/child health has become a priority activity of the health sector. There are few who would question the appropriateness of these moves.

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[1] In a letter from Andrés Cardo-Franco, Director Superior of the Ministry of Education in Perú, he acknowledged that the survey is an initiative "de sumo interés e importancia", but also informed us that the initial educational reform process in Perú is in a transitional stage and is not yet ready to be subjected to the type of diagnostic analysis proposed in the survey project design. For this reason he requested that we postpone the Peruvian part of the study until 1979, "un año en que también contaríamos con más y mejores posibilidades de cooperación". Since the study would be completed prior to 1979, High/Scope proposed that project resources be shifted to reinforce efforts in the other three countries by incorporating a discreet economic analysis component. The proposal was implemented.

Educators are also showing an increasing concern about the developmental processes during the early years of life. The growing body of research data in Latin America, the U.S. and elsewhere indicating that preschool education programs, at least those run in controlled experimental settings can influence the later school performance of disadvantaged children is probably one factor contributing to this concern. Other such factors are:

- Extremely high dropout and repetition rates in the early years of public education and the subsequent reduction in internal efficiency of the educational system. The figures are dramatic. In rural Colombia it takes 66 child-years of investment in education for each "successful completer" of the five year primary program. Even though it is open to question how much of this "wastage" is due to problems that might be successfully addressed through preschool programs, the cost involved in providing education to students who either drop out of school before becoming functionally literate, or who repeat several grades before completing the elementary education cycle, is arguably one of the most serious problems confronting the educational sector in Latin America, and may be potentially one of the strongest economic arguments in favor of preschool intervention.

- A growing tendency to view education as a lifelong process which begins in the first days of life, and a feeling that public investment in education might better reflect this concern. Perú has even used this concept as a basis for an educational reform measure in which "initial" education is seen as the first step in this lifelong process. (Use of the word "initial" instead of the traditional "preschool" points up their orientation).

- A demand for more than custodial care from programs serving young children. Extending the scope of work of the many intervention programs currently reaching young children along the sole dimension of physical provision is seen by some as an urgent task, as well as an exciting opportunity. Many see these programs, which are often accused of attempting to resolve multi-faceted problems with monofocal solutions, as potential vehicles for initiatives aiming at the development of those basic skills and attitudes and cognitive and social abilities that a child must have in order to meet the demands not only of the formal educational systems but later life.

- Directives instructing development planners (both national and international) to channel an increased proportion of their resources to directly benefit the poorest of the poor. This has special ramifications for education in the preschool years. Those on the bottom rung of the ladder often do not even enter the formal elementary education system, and are unlikely to make it through the system when and if they do begin.

- The incorporation of women into the outside-the-home work force, and the consequent need for comprehensive care programs for their children.

For these and many other reasons the momentum of preschool education in Latin America is increasing, and probably will continue to increase as one aspect of comprehensive integral early childhood intervention efforts. However, unlike other areas such as nutrition and health, many individuals who are well informed and strategically placed in the education, social service, and development program decision-making structure seriously question the effectiveness, desirability, and/or feasibility of increased investment in preschool education programs. For example:

- Development planners and educational economists are concerned about the costs involved in a massive expansion of the education sector target audience. Budgetary support for the educational system is woefully inadequate for meeting the demands presently placed upon the system. In terms of percentage of GNP, education budgets are already at or beyond the limits allowed for this activity by current economic wisdom. Some even point out that the implications here include not only the direct costs of the preschool programs themselves, but also the potential future increased educational costs resulting from decreased dropout in the elementary system. On the other side, they point out the lack of any empirical data base which might demonstrate that preschool education in the LDC context might be an effective device to decrease wastage in the formal system.

- Many consider dubious the track record of educational systems in meeting new challenges in an appropriate manner. They view traditional educational methods as questionable on any level and cite examples in which preschool programs have become simple downward extensions of these traditional methods. The extension of the educational bureaucracy to cover another massive area of concern is seen as both unrealistic and undesirable.

- Some research data indicate that preschool education may not have a significant long-term impact or even a short-term impact on student outcomes.

- Looking at the record, observers note that a great amount of time is needed to enable new education programs to reach a significant proportion of the population. Examples cited include one Latin American country where preschool education has been a major area of emphasis for over 30 years. At times preschool education enjoyed the highest of executive priorities in this country; its universities have well established degree courses, and there are a host of government, private and semi-autonomous agencies with service programs. However, even here only 8% of the target population is being reached.

- Many are concerned that externally induced intervention during the earliest years of life may jeopardize socio-cultural adaptive systems. Little is known about the socio-cultural basis for child-rearing practices among the poorest, most isolated sectors of the Latin American population. Interference with the traditional patterns may have profound and unknown impacts on such things as the extended family structure. In Latin America, as elsewhere, there are also many that question the desirability of programs which may attempt to (or appear to attempt to)replace the parent/community as the primary educator of the child during the preschool years.

C. The Methodology

The project developed in three phases between July 1, 1977 and July 1, 1978.

Phase I, a three month period, was dedicated to consolidation of project design. During this period initial contacts were made and contracts negotiated with the Latin American counterpart groups; and initial literature review was done by High/Scope and counterpart staff, first draft survey instrumentation developed, and an initial historical review of early childhood programs in the three selected countries was carried out by the counterpart agencies. This work culminated in a field review coordinating meeting held in Bogotá in October, 1977. Representatives from the three countries as well as High/Scope and Project Portage personnel attended the meeting. Agenda items included review of the papers on historical development of programs in the respective countries and finalization of the survey instrumentation.

Phase II of the project began in October, 1977, and continued through February 1978. Activities during this period concentrated on the interview and interview documentation process.

Phase III was dedicated to final data analysis and preparation of the final report. In mid-March a second coordinating meeting was held in Ypsilanti to review the first draft of the completed country reports and discuss the content of the final report. High/Scope staff, building upon these discussions, then drafted a preliminary version of the report for circulation and comment to the counterpart agencies prior to preparation of the final version.

In addition to the two review meetings, throughout the project communication between High/Scope and the various agencies was maintained in a series of circular letters, as well as through quarterly progress reports prepared for the project monitors. AID mission personnel in the participating countries and selected outside contacts interested in the work under this project were also recipients of these reports.

As mentioned above, two mechanisms were used to gather data under this project. The first was a review of available literature on preprimary education. The second was a series of interviews with people concerned with young children in the participating countries.

Literature Reviews

The three Latin American counterpart agencies did a thorough review of the available literature on early childhood programs in their respective countries, and prepared an annotated bibliography of the documents judged to be most useful and pertinent to the task at hand. The literature review included books, reports, theses, statutes and other material pertaining to the subject of preschool education. The bibliographies were developed in accordance with the following outline:

> The policy basis of preschool education in(country). This includes references to appropriate legal documents with directives pertaining to public preschool education or articles of constitution, by-laws or other such documents for programs run by private or semi-autonomous agencies.
>
> Research in preschool child education in (country). This section references proposals, reports and other documents on experimental programs in preschool education in different countries.

Service programs in preschool education. This section references descriptive or analytical literature on past/current intervention programs providing preschool child education services in the countries.

General references. This section includes references on publications in other areas (e.g., nutrition, curriculum development, etc.) that may be of interest in conducting the survey, either from (country) or from general professional literature.

A total of 180 references were reviewed by the counterpart agencies in this part of the data collection task. The bibliographies prepared by the counterparts are included as attachments to the individual country reports.

High/Scope also prepared a bibliography on references available in the U.S. that are pertinent to early childhood education in the developing world. The bibliography in Attachment A to this report is a selection from the combined counterpart and High/Scope references.

Interviews

The second method for data collection was a series of interviews with a selected group of representatives of national and international groups working with preschool-age children in the Andean region (and elsewhere). In each of the three countries (and at the U.S. headquarters of a number of international agencies) people interviewed included:

- national policy makers, including authorities in Ministries of Education, Budget and Development Planning Offices, and social welfare agencies;
- professionals in universities and private organizations, directly involved in activities related to early childhood education, including people involved in teacher training, service delivery, and research and development programs;
- technicians and management personnel from international agencies and groups working on human resources development, including public and private and bilateral and multilateral organizations.

The counterpart agencies were responsible for implementing and reporting on the interviews in their respective countries.

High/Scope was responsible for the international agency interview process. In all more than 100 people working at all levels on the human resource development programming spectrum were interviewed as a part of the data collection process.

The questionnaire for the interviews was developed out of conversations held during the first field review coordinating meeting held in Bogotá. The questionnaire was developed to expand on four basic questions.

- What are the central issues or concerns in early childhood education among the selected countries?
- What strategies heve been employed in developing and operating early childhood education programs?
- What have been the major obstacles to overcome in implementing and maintaining these programs?
- By what measures are early childhood education programs judged to be successful?

Comments on the Methodology

The comments below on aspects of the survey methodology should be seen in light of the following key assumptions underlying the design of the project. We assumed:

- that there presently exists a rather large body of fairly reliable data on preschool education in the Andean region of Latin America, as well as a sizeable group of policy makers and early childhood program administrators in the countries themselves and in the international agencies that have intervention programs reaching young children and their families. These people are reasonably knowledgeable and have important opinions on the issue of preschool education in developing countries.
- that an international, inter-institutional effort would be the most efficient way to gather and analyze the policy implications of this body of data.
- That it is possible to use these data to design a conceptual framework that would be useful to policy makers in reviewing the advisability of preschool education in the context of a given developing country.

The Data Base

While there is a consensus among survey participants that gathering and analyzing existing data may have been a necessary first step, and that little has escaped our collective efforts to pull together all that is available, we have a strong sense that some of the key data we are relying on are highly suspect, and that there are significant gaps in our knowledge. The lack of field observations of preschool programs and the suspected lack of reliability and the existing data on the costs of preschool education are two especially important examples of the incompleteness of our knowledge.

With several notable exceptions, we also found that domestic as well as international agency personnel involved in social service/human resource programs in the region are generally unfamiliar with the issue of cognitive/social development during the preschool years.

This was especially evident in the international agencies. With two exceptions, the representatives of the international agencies contacted with the interview request suggested that it might not be too useful to discuss the issues of pre-primary education with them. In spite of the fact that all were chosen because of their work in education or early childhood development, they saw pre-primary education as at best marginal to their efforts and area of expertise. Reading over the interview reports, one might conclude that in the opinion of most of those contacted, the important learning begins with entry into primary school. At that point the institutional competence and outreach of the education system, rather than the individual's preparedness, is perceived as that which really determines a child's success.

The Management Plan

The ad-hoc international network set up for this project did prove its value as an effective and appropriate mechanism for data gathering and reporting. It was also obvious that all three counterpart agencies spent time and effort far beyond that called for in the covering agreement.

The Policy Analysis Framework

We simply did not move far enough toward the development of a clear, explicit, and cohesive framework for utilizing all the data gathered under this project. In the final analysis we still had to fall back on such concepts as "integral attention to the basic needs of the child" and caveats about the extreme caution necessary when one attempts to develop intervention efforts which are truly sensitive to such factors as cultural diversity and current adaptive systems.

Adding to the problem, data from this survey, as data from many prior surveys, indicate that only a small fraction of the Latin American population are at a critically low level on any one of the basic need indicators; instead, most of the population is low on several of the indicators at the same time. In this situation, traditional research-based evidence that stems from single-cause, single-effect approaches is not very useful. And

as for policy recommendations, there is no simple problem that can be identified and to which policy makers can attach one solution.

In conjuntion with this survey we have, however, been able to identify and list the variables that appear to be the major influencing factors in the development of preschool programs in the countries that participated in the study. At this stage there appear to be 26 variables of special significance. They are listed in Attachment B to this report. By way of an advance warning as to their usefulness to a policy maker, however, the interrelationships at work among these variables create a grid with 625 cells! Hardly a manageable tool for policy analysis.

In summary, under this survey we feel we have been successful at gathering, analyzing, and documenting a significant body of data on pre-primary education in the Andean region of Latin America. We have also identified key variables that appear to influence the decision-making process, and we have been able to make what we feel to be some important recommendations indicated by these variables. There is much to be done, however, on the task of conceptualizing a framework of analysis procedure which would be simple enough to be useful in the task of policy determination while at the same time reflecting the extreme complexity of the issues involved.

Bolivia

Overview

Bolivia has a centralized national preschool system, under the jurisdiction of the Ministry of Education, and operating largely in urban areas. Under a 1975 reorganization of rural education, the preschool level was subsumed by the primary level, to become a transitional year before first grade. There exists also in Bolivia a "decentralized" element of preschool education under the jurisdiction of the mining and related industries, and a small number of private preschools.

According to a recent Bolivian Ministry of Planning data (1978) matriculation at the preprimary level was reported by the Ministry of Education to be 38,270 4-6year-olds, of a total 4-6 year old population of 360,000. This puts preprimary matriculation at about 11 percent. It has been estimated that matriculation in the decentralized programs is about 5,200, and in private programs about 2,000.

History

Bolivia's first preschool center opened in 1855, to attend to children of miners in Potosí. In the early 1900's a few kindergarten centers opened up in La Paz and Sucre. Also in the early 1900's the first Normal School courses for preschool teachers were initiated. The general history of preschool education in Bolivia up until the 1950's was marked by a series of decrees, stating broad objectives and delegating broad responsibilities.

In the last 25 years matriculation at the preprimary level has gone up, according to authoritative Bolivian sources, from 3.6 to about 8 percent, almost all of the matriculation being among children 4, 5 and 6 years old. The following table illustrates the historical trend in relation to other levels of the system.

II. The Country Reports:
Bolivia, Chile, Colombia

Level \ Year	1952	1955	1960	1965	1970	1975
Preschool	3.59	3.66	4.86	5.61	5.83	7.98
primary	30.92	44.07	50.72	60.69	63.67	66.06
Secondary	8.84	9.47	12.6	19.9	24.7	19
Total	19.07	25.95	30.3	37.4	41.6	41.9

Table I: Bolivia : Historical trends in preschool enrollment (as percentages of total population).

There has been, historically, an implicit tendency to consider preprimary education as a transitional or preparatory year for first grade. This tendency was formalized in the rural areas in 1975 by the elimination of rural preprimary education, and incorporation of the programs into the rural primary system.

Priorities and Objectives

A number of decrees have been promulgated over the years outlining objectives for preschool education in Bolivia. The most authoritative are considered to be those promulgated in the 1955 Education Code:

1) To maintain physical and mental health in the child.

2) To help the child acquire positive social attitudes.

3) To enhance the biological and mental development of the child.

4) To encourage expression of creativity and initiative.

5) To guide and enhance the child's early experiences.

6) To provide activities for motor development and language.

7) To adapt the child to his environment and to school.

Educational policy makers in Bolivia interviewed by the investigators in this project mentioned as important objectives to inculcate in children the best possible habits of study, work discipline, and morals; and to meet the children's bio-physical and socio-emotional needs. Broad priorities included attention to children in rural areas, the need to train specialists in preschool education, the need to expand the preschool infrastructure throughout the country, and the need to develop materials for preschool education. An implicit priority that infused the statements of many people was to prepare young children for first grade.

Administrative Organization

The Education Plan of 1975 in Bolivia re-structured preschool education as follows:

1) There will be one year of preschool education, not obligatory, for children 5 years old, to be part of the primary system.

2) It is foreseen that for children 1-5 years of age non-formal programs will be developed, coordinated with the formal system.

3) It is foreseen that the preprimary program will also offer non-formal activities, in accordance with the needs of the community.

The general organizational structure of preprimary education in Bolivia appears as follows (within the Ministry of Education):

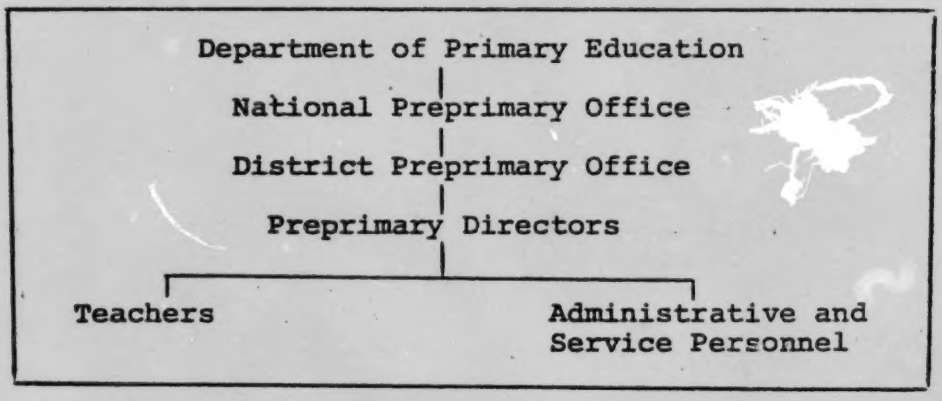

Table 2: Bolivia: Organizational Structure of Preprimary Education.

Curriculum and Activities

In the 1975 Education Plan a preschool level "plan of studies", or curriculum, is outlined; it is reportedly similar to one developed in 1969, which outlines 8 activity areas at the preprimary level. These areas are as follows: 1) health, 2) psycho-motor, 3) sensory, 4) initiation to modern mathematics, 5) language, 6) understanding of nature and of work, 7) aesthetics, 8) social life.

Personnel

The three basic types of personnel working in preprimary education in Bolivia are administrators (center directors, supervisors, trainers), making up 18.6 percent of the personnel force; teachers, making up 69.5 percent of the personnel force; and assistant teachers, making up 11 percent of the personnel force.

An estimated 64 percent of the teaching force is made up of normal school graduates specializing in preschool education. About 14 percent of this force are secondary school graduates, 14 percent interns, 5 percent urban primary school graduates, and 1.5 percent rural primary school graduates. About 1 of every 4 preschool teachers has no training at the preschool level.

Student-teacher ratios vary according to geographic zone and location in urban or semi-rural setting. Estimates range from about 28 to about 34 to 1. There is one assistant teacher for every 167.3 students.

Materials

There is no uniformity in the use of materials in the preschool education in Bolivia. There are often complaints about the limited didactic materials available. Usually, it is the teachers themselves (sometimes with the help of the children) who make the materials that are used. The creativity of the teachers is often shown in the use of "waste materials", that is, empty boxes, corks, bottle caps, seeds, sticks, buttons, dry leaves, candles, cloth, cans, jars, wool, light bulbs, etc. Other centers have didactic materials that are considered in a more formal sense to be learning materials, like didactic pictures, puzzles, bingo cards, toys, blocks, figures to cut, number counters, table service, stories, magazines, slides, playdough. Some centers, especially the private ones, use

expensive materials imported from Latin American countries (Argentina, Chile) or European countries (Spain, Germany).

In general, it is recognized that the preschool teachers in Bolivia are creative in developing didactic materials from simple elements. Some teachers have the tendency to make everything themselves without participation of the children. Recently, in several preschool centers an innovative trend towards more activity and participation of children in the construction of materials has been noticed.

Planning

The 1975 National Education Development Plan does not foresee expansion of preschool education as a priority for the education system in the next few years. This may be due to basic unfulfilled needs at the primary level, especially in rural areas. Preprimary education in the rural areas may eventually be considered within the context of the rural nucleo concept as the first grade in the nucleo school.

There appears to be a lack of specific, concrete plans for the short, medium and long terms within the primary directorate of the Ministry. Various officials interviewed mentioned various possible future action at the preprimary level--making it obligatory, developing clearer norms and objectives--but there is no unified vision of the next steps.

Evaluation

The major part of evaluation currently undertaken is of individual children's progress in the classroom, using instruments developed in the Ministry and the impressions of classroom teachers. While there has been no formal comparative study of progress in primary school for children who attend and don't attend preschool programs, some of the teachers and officials interviewed in this study indicated that children who attend preschool are better prepared for first grade. There are no results available of evaluations of preschool centers, or of the whole program.

There are a few pilot experiments that are being implemented currently in Bolivia. One example of current efforts is a program underway in La Paz, the "Centro Cultural y Social" for children in the marginal barrio of Achachicala began functioning in 1969 as a non-formal program whose goal is to enhance the personality development and creativity of the child in the marginal areas. The method used in the "Centro Achachicala" is designed to enhance group work and the autonomy of children. Some important

elements of this experience are low cost, small amount of time necessary for completion of activities, flexibility, informality, spontaneity and freedom. Work is done in the areas of communication, sensitivity, concepts of quantity and space, reasoning, physical development and creative expression. It is anticipated that the program will have three levels, but there are two in operation. Although the experience has not been evaluated, it seems that the model as it is offers a new method of focusing on preschool education.

Problems and Challenges

Those involved in the development of preschool education in Bolivia are faced with a number of challenges distinctive to the Andean countries in general, but particularly concentrated in Bolivia. Much of the country is altiplano, mountains, or jungle. In the altiplano, there are generally very high infant mortality and morbidity rates, due both to lack of social services and the ecology of the region.

Two thirds of Bolivia's population are Quechua or Aymara Indians with their own language, values and systems of educating children.

Bolivia's educational system in general is acknowledged to be functioning less than efficiently, both in terms of its content and the coverage offered the school age population. How much of the scarce resources available should be committed to preschool education? Should the principal effort be to make the primary system more functional? These questions remain to be answered in the coming years.

Aside from the above mentioned challenges, a number of concrete problems were mentioned by those interviewed for this study. Among these are: lack of inter-ministerial cooperation in actions on behalf of young children, excessive bureaucracy, lack of trained personnel, lack of classrooms and materials.

Conclusions

There are no major new plans or programs developing at this time, and other serious deficiencies in the educational system deflect concern away from this level. Bolivia's largely rural geography and its largely Indian population suggest that traditional, formal kindergarten education is not an answer for this country. Yet, at this moment, no other answers are forthcoming to better support the basic cognitive/social and emotional development needs of the neediest sectors of the population.

Chile

Overview

There are currently four program bases for preschool education in Chile. The first is the program of the Ministry of Education which reached 81,639 children 4-6 years old in 1977. The second is the program of the National Preschool Education Council (Junta Nacional de Jardines Infantiles), under the administrative direction of the Ministry of the Interior, which reached 39,753 children 2-6 years of age in 1977 (11,805 of them 4-6 years of age). The third base is the network of private preschool centers, reaching about 29,000 children. The fourth is the series of experimental pilot programs that have been run under various auspices.

The major programs (focus of this discussion), those of the Ministry of Education and the National Preschool Council (JNJI), are divided into levels - for children 0-2, 2-4 and 4-6 years of age. The large majority of the children reached by these programs are 2-6 years of age. Children 0-2 years of age, when involved in any early intervention, are involved with activities of the National Health Service. The large majority of children reached are also in urban areas, the JNJI has not, to the present, developed activities in rural zones. The Ministry of Education has enrolled about 4,500 children from rural areas.

In 1977 total preschool matriculation in Chile was 148,181 children. This was 9.5 percent of the total 2-6 age group, and 18 percent of the 4-6 age group. Of total matriculation 81 percent was in the two public programs, 19 percent in private centers.

The following chart outlines the differences and similarities of the Ministry of Education and JNJI programs with respect to selected important characteristics:

Program / Characteristics	Ministry of Education	Junta Nacional de Jardines Infantiles
Levels served	Children 4-6	Children 2-6
Nutritional Service	70% of daily requirements to children in extreme proverty	100% daily requirements provided
Hours daily	4 hours	8 hours
Months per year	9 months	11 months
Classroom Personnel	Professional teachers	Professional and/or paraprofessional teachers
Target population	All children	Children in extreme poverty
Jurisdiction	Min. of Education	Min. of Interior
Classroom location	Usually annexed to a primary school	Independent buildings

Table 2: Chile -- A comparative chart of two programs.

History

Until 1970 preschool education in Chile consisted of a few public and private kindergartens serving a small population

of mostly urban children. Legal bases for preschool education were in development since the early 1900's, with laws mandating child care facilities in factories, teacher training programs in universities and normal schools, and a section in the Ministry of Education responsible for preschool education. Yet action, in terms of coordinated program development, was extremely limited.

In 1970 the JNJI was created and placed under the auspices of the Ministry of Education (where it remained until November 1976, passing then into the Ministry of the Interior). The creation of the JNJI, whose responsibilities included planning, supervision, promotion, coordination and implementation of preschool education throughout Chile, led to the first large scale action and commitment of resources to the area by the government. For example, enrollment in Ministry of Education preschool programs increased by 43 percent between 1973 and 1977. Enrollment in JNJI preschool programs increased 600 percent in that same period.

Priorities and Objectives

Chile's two major programs, the Ministry of Education and JNJI programs, have the same broad goals, but different priorities and emphasis. Both programs aim at providing young children integral attention, meaning attention to nutritional and health, as well as educational needs. Yet the JNJI in actuality concentrates more than the Ministry on non-educational services, possibly because of its target population priority, many of whom are malnourished and may have health problems (the Ministry of Education has no such priority).[1] An explicit objective and priority of the Ministry of Education program and the JNJI program is preparation of children for first grade. In the JNJI program this objective pertains more to the transition level than to services for children up to 4 years of age.

Both programs have as objectives working with parents to help them better meet young children's needs, and working with programs and sectors that are trying to improve living conditions and the quality of family life.

Administrative Organizations

The Ministry of Education program operates under the auspices of the Directorate of Primary and Normal Education in the Ministry. It is responsible for supervision of all public and private preschool programs throughout Chile, administering the norms and guidelines for preschool education developed by

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1 The JNJI's health services are provided by the National Health Service, part of the Ministry of Health.

the Ministry's normative bodies. Its direct responsibility is administration of the public school "transición" (transition or Kindergarten) programs for children 4-6 years of age.

The JNJI, under the auspices of the Ministry of the Interior's Program of Social Action, is semiautonomous in operation. It has its own Board of Directors, led by the wife of the President of Chile, and a large measure of autonomy over how its funds are used. The JNJI has a central directorate and 16 regional offices. The former has offices of Administration, Finance, Planning and Programs, and Technical-Pedagogical Matters (including social, nutritional and educational curriculum activities). The JNJI also gives technical assistance to private programs.

Curriculum and Activities

There is an official curriculum required to be used by all preschools in Chile at the "transition" level. It contains a list of desired behaviors and abilities, matched with suggested activities demonstrating the behavior or ability, and methodological suggestions to help teachers develop classroom activities. There is also a glossary of behavioral norms for children 4-6 years of age in the various domains of development. The curriculum is supposed to be based on Piaget's developmental theory and Gesell's norms. It is designed for use by fully trained teachers.

In both the Ministry of Education and JNJI programs there are guidelines for daily routine, the former based on a 4 hour day, the latter on a 8 hour day. In both programs about 2 hours are set aside daily for formal educational activities. Other activities taking up significant amounts of time include washing, cleaning up and assorted hygiene activities, snack, outdoor recreation and meals. The Ministry programs provide lunch, the JNJI programs breakfast and lunch.

Personnel

The personnel structures of the Ministry and JNJI programs differ significantly. The Ministry relies almost solely on fully trained teachers, operating more or less in isolation in the classroom. The JNJI uses teams with fully trained teachers, paraprofessional teachers, nutritional service auxiliaries, and directors of the centers. It is common for the primary teacher in many JNJI classrooms to be a paraprofessional supervised by a professional. The Ministry of Education seems to be based on a more vertical personnel structure, the JNJI a more horizontal structure.

Materials

The JNJI, which relies on a standard list for equipping classrooms, supplies part of the materials itself, and relies on teachers, paraprofessionals and parents to supply the rest. The Ministry supplies only a few basic materials, and relies largely on teachers and parents to supply materials. The Ministry of Education program and the JNJI transition level classes use a textbook or "primer" for 5 and 6 year old children, whose function is to prepare the children for reading and writing. There seems to be a general shortage of formal materials in many classrooms in both programs and much is left to individual teacher initiative.

Planning

National plans for preschool education for the two major programs are developed in the office of the Superintendent of Education, a normative body within the Ministry of Education. The plans are supposed to be made in consultation with officials from the JNJI, the Ministry of Health and others working in the area of services to young children.

At present, a reformulation of preschool education policy is underway. Preschool education for children in extreme poverty has been included as one of the educational priorities within long range national strategies for economic and social development. It appears likely that children in rural areas will have increased priority, followed by children in urban poverty areas. Also, children 0-2 years of age in need of services will be reached through programs developed by the National Health Service. The long-term goal is to reach the total rural poverty population in 20 years and the total urban poverty population by 1985. It is possible that the JNJI will cut its full-day programs to a half day, for those families in which mothers are not working, in order to reach a larger number of children in extreme poverty.

An important factor influencing plans has been a feasibility study carried out by the Interamerican Development Bank and the Chilean Office of Planning. This study examined the potential costs and benefits of developing a national preschool program of Centers of Integral Care to be targeted toward urban children in extreme poverty. Using a Chilean study (Mapa de Extrema Pobreza) identifying the size, location and characteristics of Chile's population living in extreme poverty, the study team developed a series of estimates for costs of alternative strategies of services, and hypothetical individual and social benefits. This is probably the first study in Latin

America that has laid out a hypothetical cost-benefit picture for those considering investment in preschool education as one means of attacking poverty.

Evaluation

There have as yet been no efforts to evaluate either of the major preschool programs in Chile. Many of the experimental pilot programs have had clearly defined evaluation components (see next section). But most evaluation outside these programs is of individual children in the classroom.

The JNJI program uses attendance registers and monthly height and weight measurements of children diagnosed as malnourished upon entering the program. Anecdotal records and observation schedules are used to evaluate cognitive, motor and social development. These are applied three times a year. The Ministry of Education also uses an observation schedule to evaluate cognitive, psycho-motor, and socio-emotional development of children enrolled. This instrument is also applied three times a year. The Ministry of Education uses this instrument to control passage of children to first grade.

Experimental Pilot Programs

There have been two notable pilot programs in Chile designed to examine the potential of alternative service delivery models for meeting the children's basic educational and physical needs, and one rather extensive effort in innovative curricula design for preschool programs.[1]

The "Programa Padres e Hijos" (Parent and Child Program) of the Center for Research and Development in Education (CIDE) is also a program of parent education. This program operates in a rural area of central Chile using trained group leaders to work with groups of parents in regular meetings. Various childrearing themes and issues are discussed, using the

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[1] In addition to these preschool efforts there is also an experimental parent-infant program that may be important to reference. The "Programa de Estimulación Precoz" (Program of Early Stimulation) under the leadership of Dr. Hernan Montenegro of Chile's National Health Service was a home-based parent education program examining the effectiveness of instructional manuals in combination with paraprofessional home visitors in enhancing the mental development of infants. Control and experimental samples of mothers were chosen from among those visiting maternal and child health clinics. Treatment mothers were taught how to use a series of manuals (one per month) giving guidance on infant stimulation for children 0-24 months of age. The project team also examined differential effects of mothers and infants entering the program at different times in the infant's first year of life.

pedagogical philosophy of Paulo Freire (briefly, adults are motivated to learn when the content pertains to concrete issues in their lives, and when they can be active participants in shaping the knowledge shared as a group). Group leaders also work with parents to develop materials that can be used in the home to stimulate young children.

The "Plaza Preescolar" program (Preschool Center) of the Preschool Foundation, a private agency, was designed to examine the effectiveness of a low cost educational program relying on community physical and human resources in poor communities in meeting young children's educational needs. The program used available public land in one of Santiago's barrios to construct two simple structures, with outdoors learning centers delineated by low fences and a small indoor area. Paraprofessionals from the community were trained as teachers. The idea was to see if the program could be run on a small resource base.

A number of Chilean educational institutions are experimenting with adaptation of the High/Scope Foundation's Cognitively Oriented Curriculum to a variety of preschool program settings. The above-mentioned Plaza Project used this curriculum model in design of the curricula for the children and the teacher training model. The JNJI presently operates eight preschool centers with approximately 900 students where the curriculum model is also in use. The Schools of Education of the University of Chile (in Santiago, Concepción, Talca and Antofagasta) and Catholic University (in Santiago and Valparaiso) also include study of the Cognitively Oriented Curriculum in their preschool Teacher Training courses.

Problems and Challenges

Perhaps the principal challenge facing Chile's two major programs, and others involved with pilot efforts, is to reach more than a small percentage of young children living in extreme poverty. Currently a total of 13.2 percent of all young children in extreme poverty are attended to in both major programs. The JNJI, with a policy emphasis on serving these children, has 55.6 percent of its matriculation from this group. The Ministry of Education has 39 percent of its matriculation from children in extreme poverty. The goal of reaching the remaining 87 percent of these children by 1985 is certainly an ambitious one.

The concerns of those interviewed in the present study reflect other major challenges and problems. Mentioned by many of these officials and teachers were: 1) inadequacy of current approaches to working with parents, 2) the need for research on the situation and priority needs of the Chilean preschool child, 3) the need to more actively seek alternatives to formal

programs in order to reach many poverty children currently out of reach, 4) the need to develop more effective evaluation instruments and personnel trained in this area, 5) the need for more special education programs, and 6) the need for program objectives to be defined more clearly and concretely to provide better guidance to teachers.

One potential problem emerges from the fact that there are two major programs operating in the field of preschool education. Not only is there competition between the programs--for resources, for responsibility--but there is also the possibility of duplication of services, a problem that a developing country with a scarce resource situation can ill afford.

There is a strong emphasis on quantitative expansion of the system, and very little planning in terms of the type of program which might be most effective and efficient. Expansion of the existing system involves very high costs. Perhaps it might be necessary to study existing programs in order to be able to identify those aspects which should be maintained and those which should be changed.

Conclusions

Chile has gone as far as any Latin American country, and probably farther than most, in elaborating the lines of action necessary for meeting the needs of young children, especially those living in poverty There are two well developed national programs, and many talented and well trained people working in these programs. In addition, Chile is the first Latin American country to have mapped out the number and location of young children living in extreme poverty, and to have examined potential costs and benefits of investment in programs for these young children. Chile, then, is "ready" to meet young children's educational needs. Whether it will in fact be able to do so will be seen in the next few years.

Colombia

Overview

In Colombia, preschool education is currently in a situation of flux and realignment in terms of service offered, populations being reached and levels of administrative control and planning. As recently as 1975, 70 percent of preschool services being offered were in the private sector, and public programs were scattered across a number of agencies and weakly funded. The Colombian Institute of Family Welfare (ICBF), the government agency responsible by law for coordinating services to young children, has only recently begun to provide a focus an a resource base for preschool service.

Colombia in 1975 had approximately four million children under seven years of age, of these, over 1,800,000 are in the age-range of four to six years. Enrollment in preschool programs for this age group, by now closer to two million in size, stood in 1977 at 96,500 or about five percent.

Although ICBF's Centers for Intergral Attention to Preschoolers (CAIPs) constitute at present the major publicly funded thrust, and the one that is most rapidly increasing in importance and coverage, two other important public preschool service programs exist in the country: the Ministry of Education's preschool centers, and the preschools of the Administrative Division of Social Welfare of the Special District of Bogotá. A number of universities and community-development agencies also have their own centers. Colombian officials have suggested that the CAIP program will eventually form the skeleton of a national preschool network to which all other public preschool efforts may be affiliated, a possibility made more likely by the CAIP funding base.

History

Historically, preschool education in Colombia has been an urban phenomenon, private kindergarten centers being built in a few major cities serving mostly children of wealthy families, or supported by private charity. In 1962, the first public kindergartens were built in a few urban centers and department capitals. Along with these were built the first child care centers for children under 4 years of age. Also during the 1970's a series of resolutions were promulgated establishing norms for various aspects of preschool center functioning. By 1970 there were 28 public kindergarten in Colombia.

In 1968 the Colombian Institute of Family Welfare (ICBF) was created to coordinate all action on behalf of young children and their families in Colombia. A number of nutrition and health programs were incorporated into ICBF, and in 1970 an ICBF program called Community Infant and Young Child Centers (CCI) was begun to provide service to poverty children and their families not being reached by other actions. These centers developed slowly, and in 1974 the program was superseded by the passage of Law Nº 27. This Law established norms for the creation of Centers of Integral Attention (CAIP) for preschool children of employees in various public and private enterprises, and secondarily for the children of the unemployed and indigent. The CAIP program is funded by a 2 percent contribution to ICBF of the total payroll of all public and private enterprises; ICBF operates the program with these monies.

Priorities and Objectives

No one set of objectives that would constitute a policy for preschool-age children exists in Colombia; various institutions have their own objectives. The closest thing to a national policy can be found in Law Nº 27 and a 1975 decree (Nº 626), outlining the process for the development of a national network of programs to provide "integral care" to the preschool child. Law Nº 27 and decree Nº 626 nonetheless are basically administrative in nature, and do not speak to substantive objectives.

The broad objective of the CAIP program, to provide "integral care", is made more concrete by definition of "areas of action", physical care of the child, stimulation for psychosocial development, educational action with the family, promotional action (including mobilization of community resources), and provision of complementary services.

The Ministry of Education program seeks to provide to children 3-6 years of age educational preparation for first grade. Not included is physical care of young children (nutritional and health service). Other institutions have varying goals for their activities, ranging from provision of physical care and security (Foundation for the Adoption of Abandoned Children), to research and development of educational curricula, intervention strategies, and teacher training methodologies (National Pedagogical Institute, University of San Buenaventura).

Most agencies involved in preschool education in Colombia are increasingly emphasizing nutritional and health as well as educational needs of young children, and the priority of education per se is only foremost for the Ministry of Education preschool centers.

Administrative Organization

ICBF, the agency responsible for general coordination of activities on behalf of young children in Colombia, has actual administrative control only over its own programs, most notably the CAIPs. The CAIP program is run by ICBF's regional offices, which have a good deal of autonomy in selecting CAIP sites within their regions, and actual supervision of CAIPs is done by the regional social promotion offices.

The decentralization of ICBF's decision making and program administration is reflected also at the center level in a differentiated center network. In the larger population centers these are "nuclear" centers with a full range of support services and supervisory personnel responsible to a series of "satellite" and "peripheral" centers located in less densely populated areas and relying on the "nuclear" centers for many program activities.

The Ministry of Education has a Division of Preschool and Special Education under the auspices of the Directorate of Administration. There is also a Division of Curriculum Design for Formal Education, one of whose functions is development of preschool education curriculum.

The city of Bogotá has its own social sector infrastructure, part of which is a Division of Social Welfare, with an Education Section. As part of this section there have been developed 50-60 preschool centers, mostly in marginal areas. They are under the broad jurisdictional authority of the office of the mayor of Bogotá.

The large majority of children receiving preschool services in Colombia continue to do so through a large network of private programs. Administration of this network remains in the hands of the individuals and institutions providing services.

The number of preschools operating in the public sector has been estimated by the Bernard Van Leer Foundation to be about 170. This was in 1975; thus it may be over 200 by now. The Ministry of Education has about 20 centers; the city of Bogotá about 50-60 centers; and ICBF is running the remaining 120, either as CCIs or CAIPs.

Curriculum and Activities

The Ministry of Education's preschool centers offer a program aimed at enhancing primarily cognitive development. Important elements of this program include sensory-motor activities, logical reasoning, socialization, affect and artistic and verbal expression. In practice the program focus in most Ministry centers is to prepare children for first grade. ICBF provides supplementary nutrients in a number of the Ministry's preschool centers.

A typical Ministry preschool center accommodates three groups of children during the day: from 7:30 to 10:30 a.m., from 10:30 to 1:30, and from 1:30 to 4:30 p.m. Each three hour session includes hygiene, clean-up and other routine activities, language activities, activities in various learning activity centers, new activities, free play and motor development activities.

The ICBF preschool centers offer a program including the following activities: physical care of the child (nutrition and health control), psycho-social development, educational action with the family, promotional action (in the community) and complementary services of ICBF. The ICBF programs generally run in one session, from about 7:30 a.m. to 4:30 p.m. Breakfast, lunch and a snack are provided by ICBF.

In contrast to the above fairly uniform curricular viewpoints, Colombian private-sector preschools tend toward curricula that reflect the needs and priorities of the groups they serve. The Victoria Bossio Preschool also has a teacher training program and Ms. Bossio herself has provided leadership in traditionally oriented early education in the country. Their curricular approach emphasizes the following areas: intellectual development, socialization (viewed as the acquisition of self-control and of appropriate social habits) and self-reliance. A contrasting example of private-sector program emphasis is offered by FANA, an organization aimed at assisting abandoned lower-class children and finding adoptive parents for them. Since the organization serves as a way-station for the children it is not strictly comparable to a regular preschool, but its explicit goals are quite comparable to those of other privately funded charitable preschools. In priority order, these goals are nutrition and health, psychological and emotional development, adaptation to the environment, acquisition of skills, and readiness.

Personnel

There is a severe shortage of trained professional personnel for preschool education in Colombia. Although a number of universities now have training programs (Universidad Pedagógica Nacional, Universidad San Buenaventura, UNINCCA, Instituto Superior de Educación, CINPE, CIEDI), the number of graduates is still very small; as recently as 1973, only 57 teachers graduated with a preschool specialization in the country. Most of the programs, in addition, are five-semester (2 1/2 year) courses; only the Universidad San Buenaventura has a four-year program, although the Universidad Pedagógica Nacional is currently planning one. The high demand for more qualified personnel created by ICBF's CAIP program is meeting with a response by training institutions, however, and the number of professional preschool teachers available can be expected to increase rapidly over the next few years.

In the private sector, a major force for training has been Victoria Bossio. Graduates from her Institute, however have been principally working in the private middle-class-oriented preschool, and the number of graduates is still relatively small.

This lack of specialized professionals has meant that preschool programs rely heavily on paraprofessionals and volunteers, and train their staff through brief preservice courses. In the operating model for ICBF's CAIP system, for example, only a few centrally-located units in each region (the so-called nuclear centers) have a multi-disciplinary professional team. At a more dispersed level (that of the satellite centers) only the center director may be a professional, while at the peripheral centers the teacher/director is usually a paraprofessional. At all three operational levels, paraprofessional and volunteer staff round out the program structure.

For the moment, then, the demand for preschool teachers is much greater than the supply of trained staff, and the gap is being narrowed by preservice training. Program personnel represent a mix of levels of training and experience, and over the next few years this situation can be expected to continue. The production of more specialized teachers by training institutions and the diffusion of training through inservice courses can be expected to gradually help upgrade the level of experience and skill of preschool staff.

Materials

Material resources for learning and play in preschool settings in Colombia are generally fairly scarce. Supplies from central program organizations arrive sporadically and receive heavy use. Teachers are generally responsible for supplementing this material with whatever they can get from community sources, find as scrap or buy with their own money. Ministry of Education preschools, for instance, have limited amounts of plastic and wooden toys, most of which show heavy wear. Scrap and found materials play an important role. At the ICBF CAIPs there are scrap materials and some wooden toys. At sites for both programs, paper and paints, for instance, are scarce or nonexistent.

UNICEF has attempted to support preschool programs by providing some material resources, but these are not enough for the demand. In general, supplies and materials are scarce, and what is available is supplemented by the ingenuity and resourcefulness of the teachers.

Planning

Although the Ministry of Education has two divisions in principle concerned with planning for the preschool sector (the División de Educación Preescolar y Especial, and the División de Diseño y Programación Curricular de Educación Formal), in practice preschool education planning is dominated by ICBF through its administration of the CAIP program. Current plans for the latter organization involve a strong increase in coverage within the bounds of the legal mandate (Law 27 of 1974, and Administrative Decree 626 of 1975), which set as priorities the children of workers, the unemployed and the poor. No upper bound has been set for coverage, nor has an overall plan been defined. No well defined plan currently exists for monitoring the private sector.

Evaluation

Although the various experimental and pilot programs (see next section) include strong evaluation components, neither the Ministry of Education nor the ICBF CAIP programs have systematic evaluation. Attendance registers are kept, but no other systematic record-keeping currently exists.

Experimental Pilot Programs

Two major research efforts and at least one significant pilot program have been carried out in Colombia in the area of early childhood, and have served as a basis for recommendations and as sources of knowledge for practitioners and policy-makers.

Under the Colombian Institute of Family Welfare's Directorate for Nutrition and in Cooperation with Harvard University's School of Public Health, since 1968 a number of linked studies on nutrition and early childhood physical growth and mental development have been carried out in low-income urban neighborhoods in Bogotá. The culminating effort in this series of studies has been a prospective longitudinal experimental intervention on families and children under three years of age, contrasting the effects of nutritional supplementation and psychological stimulation on the growth and development of young children at high risk of malnutrition. In this study, a sample of pregnant women who had already had one or more malnourished children were randomly assignated to various treatments or to one of the control groups; stimulation was provided through specially trained paraprofessional home visitors, using twice-weekly visits of one hour's duration. Although the interventions ended when the target children reached three years of age, a follow-up phase is planned.

The Center for Development of Non-Formal Education (CEDEN) began in 1975 a pilot study using community and family-oriented non-formal education as a technique, with the goal of furthering the development of preschool-age children in a low-income urban neighborhood of Bogotá. A variety of materials and approaches have been tried, combining different media and message presentation forms: audiovisual presentations (films, slide-tape), demonstrations, distribution of printed materials, open discussions, circulation of home-made toys and objects.

In Cali, the Human Ecology Research Foundation has carried out since 1968 a series of basic and applied studies on the effects of nutritional, health and educational interventions on the development of low-income urban preschool-age children. Its major longitudinal study contrasted the effects of different lengths of center-based educational intervention with a substantial nutrition component with the effects of nutritional supplementation alone, using as control groups a subsample receiving no intervention and a middle-class comparison sample. On the basis of this work a number of demonstration efforts have been carried out or are under way, and program replications and adaptations are being planned for other nearby towns.

A number of other pilot efforts and investigations of local programs are underway, including work with the "neighborhood schools" (escuelitas de barrio) of Cartagena and the pilot programs of ACAIPA in the north-central department of Antioquía.

To sum up, a considerable amount of research and applicative work is underway in Colombia at present, and a number of potentially applicable strategies are at different stages of study. Both of the research efforts and almost all of the pilot programs have formal or informal links to policy-makers and planners in the ICBF CAIP program, and effects upon this major service effort (within the constraints of its mandate) can be expected.

Problems and Challenges

Although a large amount of money is available for preschool education through the payroll tax of Law 27-2974, the major challenges facing Colombian planners in the area of early childhood (especially those in ICBF's CAIP program) have to do with the availability and upgrading of human resources and the development of clear planning guidelines and alternative intervention strategies. The number of children currently being reached is low relative to the population at need, and the amount of resources available. In part, this bottleneck is due to the lack of a suitable administrative infrastructure that can determine needs, adapt itself to the heterogeneity of the population and its needs, train and upgrade the personnel required, and direct the provision of services in a coordinated way. Although ICBF is working very hard to develop such an administrative structure, much work remains to be done in this area.

Although specific coverage goals do not appear to have been explicitly formulated, the Colombian Institute of Family Welfare is pushing ahead strongly to increase coverage. Within the constraint of an enabling law initially oriented specifically at children of workers, it is attempting to broaden coverage so as to include the children of families of greatest need. Although a variety of alternatives to center-based day care are being explored and piloted in the country, there is no clear administrative mechanism by which such alternatives can be included within ICBF's programs; in spite of this, the Institute is interested in and to some extent is supporting alternative preschool models.

The further study and determination of population needs, the adaptation of existing legislation and mandates to identified needs, the establishment of a supportive administrative and planning infrastructure, the creation and upgrading of human resources, the definition of a variety of interventive models adapted to regional and subpopulation needs, and the broadening and extension of coverage, are the basic challenges facing Colombian early education at present.

Conclusions

Colombia has taken a leadership position in Latin American preschool education by placing a strong policy emphasis at the highest governmental levels on service to the preschool-age children of the country, and by establishing legislation to provide the economic resources necessary for program efforts in preschool education. There is a national program at an early stage of development and an administrative structure gearing up to distribute and supervise the financial resources that are being accumulated for this purpose. The lack of trained human resources and of planning and conceptual capabilities are the major challenges that Colombia must handle in order to extend and broaden its coverage.

A COMPARATIVE ANALYSIS OF THE COUNTRY REPORTS

In this chapter a comparative examination of the historical development, current state, and likely trends in preschool education in Bolivia, Chile, and Colombia will be presented. The purpose of the examination will be to highlight similarities and differences among the three countries within the context of their socio-cultural, economic, political, and infrastructural realities.

Because the situations of these countries, and of young children within these countries differ in a number of ways, the comparative examination is not meant to be evaluative. Rather, the focus will be on seeking out variables that have influenced the development of preschool education, and trying to establish how they have done so.

A. Historical Antecedents

In Latin America in general there have been a number of factors associated with the development of preschool education. Among these have been (1) an interest in the social welfare of the poor on the part of religious agencies and certain influential wealthy men and women, (2) the importation from Europe of various theories about the kindergarten and early childhood by wealthy young Latin American women receiving education there, (3) the promulgation of laws and decrees for protection of minors, and (4) a need to support working mothers, particularly in urban areas.

Historically, in all three countries, preschool education developed as an urban phenomenon, and program generally reached only the children of the wealthy. Those few children from poverty situations involved in preschool programs usually

We are taking a close look at our current limited support for preschool education, and probably will phase it out by the end of this year. In terms of percentage of total population reached, we haven't even made a dent in the problem, and we have some real concerns about the quality of services to those we are reaching. We are especially concerned about the reports of brutality that take place in some of the preschool centers. It has proven to be extremely difficult to find staff that are sensitive to even the most minimal needs of the children.

The kids are terrorized by the regimentation, "forced fed" teaching of pre-academic subjects, and frequent physical punishment. We hear that even children that start out the year without special problems soon learn that the preschool center is not a very good place to be.

We don't know how much of this is true, but if it is, the programs we support may be serving more to alienate the child from the institution of the school rather than preparing him for it.

- A Latin American Preschool Education Official, February, 1978.

III. A Comparative Analysis of the Country Reports

received only physical care. Programs were often oriented toward poor children in extraordinary family situations (orphans or abandoned children). The predominant view was that the cultural and family life--the values--of the poor were deficient, and that the poor must be inculcated with the values of the wealthy classes. It is worth noting that historically, school failure of poor children did not play a role as one of the factors influencing the development of early childhood education in Bolivia, Chile or Colombia.

In Chile and Colombia private preschool systems developed to meet the needs of wealthy children, and in Colombia the number of children served by private preschools was, until recently, much greater than the number in public preschools. This fact, and all the above related information, make it clear that early childhood education in these countries has not, until recently, been seen as an instrument to equalize opportunity for poor children to succeed in either the public school system or other areas of life.

The decade of the sixties marked something of a watershed in the historical evolution of preschool education in Latin America in general, and this was true also of Chile and Colombia in particular. It was during these years that interest in preschool education in the context of planned social development began to grow. Nonetheless, the educational preoccupation of all Latin American governments during that time was with universalization of primary education, and new awareness of the role of early childhood education did not express itself in significant action until the seventies.

B. Quantitative Overview

In spite of the paucity and unrealiability of the available data on preschool education, particularly in Bolivia, it is possible to gain some understanding of across-country trends through examination of quantitative data. It must be noted that the present investigators, in presenting the following data, had to assume comparability in populations being described.[1]

Perhaps the most telling fact with respect to preschool education in the three countries is the percentage of the preschool-age population (4-6 years of age) enrolled. As shown in table 1, this figure is about 7.9 percent in Bolivia, an estimated 9.4 percent in Chile, and 5 percent in Colombia. A recent report by Gaston Mialaret for UNESCO (La Educación Preescolar en el Mundo) indicates that only 10 percent of children attending preschool in Colombia are low socio-economic status children. For Chile that figure is 39 percent in the Ministry of Education programs and 55.6 percent in the JNJI program (children in extreme poverty").

	Bolivia	Chile[1]	Colombia
Total population	498,200	1,535,741	1,832,909
Matriculation	39,793	148,181	96,566
% 4-6 pop. enrolled	7.98	18.4	5

Table 1: Preschool matriculation for Bolivia, Chile and Colombia

In terms of percentage of programs, private and public, Colombia has by far the largest private matriculation, perhaps reflecting its (until recently) lesser commitment to the population living in extreme poverty. Table 2 presents a breakdown of the situation in the three countries. (The trend in all three countries is for the public sector to play a greater role in the development of preschool education.)

	Bolvia[2]	Chile	Colombia
Private	25	19	69
Public	75	81	31

Table 2: Percentage of children in public and private programs at preschool level in Bolivia, Chile and Colombia

While there are no comparable statistics on urban-rural matriculation, due to Bolivia's elimination of rural preprimary programs in 1975, differences in the percentage of urban-rural populations, and an emphasis in Chile on planning for urban

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[1] Estimate is for total preschool-age population

[2] Private in Bolivia includes the "decentralized" sector for example, day care programs run by the mining companies.

rather than rural areas, it is clear that at present preschool education is mainly an urban phenomenon in all three countries. In Colombia about 93.5 percent of all matriculation is urban. In Chile the figure may be even higher. (An estimate would be 97 percent, using a 1976 statistic of 4500 children enrolled in rural areas.)

The student-teacher ratio in the three countries varies from about 25 to 1 in Colombia to about 28 to 1 in Bolivia and 30 to 1 in Chile (by law). These are rough figures, but they demonstrate the generally high--by European and American standards--student-teacher ratios to be found in Latin America. Even with this high ratio, it must be remembered that some teachers of young children in Latin America have minimal training in early childhood education.

C. Objectives and Priorities

Perhaps the most distinctive feature of early childhood education in the three countries is their emphasis on the nutritional and health as well as the educational needs of young children. In Colombia and Chile, particularly, there is an emphasis on integrated actions, with the physical well being of the child an important component of program planning decisions.

Early childhood education in all three countries is high in rhetoric and policy documents and relatively low in funding. Chile and Colombia, facing fewer basic infrastructural problems than Bolivia, have managed to commit more resources to early childhood education. It may be hypothesized that, in general, concern for young children's needs must wait till a certain minimal functioning of the primary education system is achieved.

Recent policy documents from Chile and Colombia, and especially from Chile, suggest growing concern for the low socio-economic status population as a priority target. This policy trend, apparent also in other Latin American countries, has important implications for the future development of preschool education in terms of strategies selected and priority needs attended to.

A policy priority in all three countries is working with parents to better meet young children's needs. Yet few effective mechanisms exist, particularly in the national programs, for working with large numbers of parents in a more than marginal fashion.

Chile and Colombia provide an example of countries moving toward the formulation of one unified policy for young children through coordination of responsibilities by one umbrella agency. (In Chile nonetheless, there is still division of jurisdiction between the Ministry of Education and the JNJI).

Feeding programs for young children have historically been the highest implicit priority of governments in Latin America, perhaps due in large part to the availability of international agency food donation resources. Yet with recognition of the complexity of young children's problems, and the importance of the familial and community environment, the recent tendency has been to prioritize integral action involving many agents and a number of sectors. This requires specific and concrete objectives, especially as responsibility for action must be clearly delegated.

D. Organization and Administration

The organization of preschool education in Chile and Colombia offers evidence of the as yet unresolved issue of responsibility for educational policy. In both countries there are two principal agencies--the Ministry of Education and the JNJI in Chile (under the Ministry of the Interior), and ICBF in Colombia (under the Ministry of Health). Whether or not this division of authority has created, or is creating, administrative problems is difficult to determine. There is supposed to be a good deal of cooperation and inter-agency planning. Also, responsibilities are somewhat different. In Chile, for example, the JNJI program is focused on children in poverty, the Ministry of Education program less so.

The existence and growing responsibilities of the ICBF in Colombia and the JNJI in Chile suggest that there is a tendency for preschool education to pass out of the jurisdiction of the Ministry of Education in both countries. The reason for this trend is not clear. It may be that the Ministry of Education is not designed to deal with nutritional and health needs, and not flexible enough to target services to particular groups of children (e.g., poor children).

Chile and Bolivia both show a tendency to centralize decision-making and program planning; almost all early childhood education activity depends on official government agencies. This is not true in Colombia. Perhaps, because of this, there has

been more of a tendency in Colombia to experiment and seek more effective models; the tendency in Colombia toward diversity and pluralism, without the necessity for centralized control, has provided a number of interesting models for other countries in the area.[1]

Colombia also differs from Chile and Bolivia in that the majority of children participating in early childhood education programs there are reached through private programs. The statistics cited earlier indicate that Colombia is reaching a lower proportion of low socio-economic status children among those enrolled, and this might be one reason. Another reason could be that lack of centralization offers the disadvantage of lack of control over choice of sub-group within the population to receive services.

While none of the three countries are paying significant attention to children 0-3 years old, Chile and Colombia are paying relatively more attention--through ICBF and JNJI activities--than is Bolivia. In Bolivia, in the past, there was a trend in that direction; but the recent emphasis is on pre-primary. It may be that Ministries of Education cannot easily shift their focus to meet the developmental needs of infants and toddlers. There is a feeling that meeting the needs of children 0-3 years old is a matter only of custodial care and attendance to physical necessities. Also, there is the reality of pressing demands at the primary, secondary and university levels. ICBF and JNJI, though their mandates to work with families--in particular young mothers--may be more naturally oriented toward developing strategies of early stimulation for infants and toddlers.

Administratively, Ministry preschool programs in Colombia are tied in with special education to the Directorate of Administration. In Chile and Bolivia they are under the Directorate of Primary Education. Preschool education is thus not viewed as a separate level of the education system.[2]

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[1] This is not to deny that there have been a few excellent pilot programs in Chile and Bolivia--for example, the Programa Padres e Hijos which is currently operating in both countries--but only to point out that in Colombia, diversity has been more of a policy.

[2] In Perú, Initial Education, the national preschool program, has now become a separate directorate, and it seems to have had the positive effect of separating preschool education out, in people's minds, as a distinct level of the national education system.

The implicit tendency is for the pre-primary year--kindergarten--to be attached to first grade, and thus become part of the primary system. The question whether preschool education is to become an integral part of the national education system in the three countries, or whether it will pass out of the Ministries of Education into other hands, remains unresolved. But the resolution of this question will do much to dictate what form early childhood education takes in these countries in the future.

Finally, one clear administrative problem in all three countries has been a lack of inter-agency and inter-sectoral coordination. The interactive nature of young children's problems (i.e., the inseparability in practice of health, nutritional and educational needs) and the scarcity of resources point to the necessity for coordinated action. There have indeed been agreements at the policy level in all three countries. But these agreements break down at the operational level, as problems of financial and personnel responsibility, lack of parallel infrastructure at the local level, and time constraints due to increased need for planning, become apparent.

E. Personnel

All three countries have a system for categorizing the level of teacher qualification, the basic distinction being between professionals, who have received either 2 or 4 years of training in early childhood education (2 years through Normal Schools and Pedagogical Institutes, 4 years through the University system), and paraprofessionals, who often receive short training courses of 2-6 weeks and occasional in-service seminars.

The Ministry of Education programs in Chile and Colombia tend to use fully trained teachers, while the ICBF and JNJI programs tend to rely more on paraprofessionals working under the supervision of a master teacher. Bolivia's Ministry of Education program also uses fully trained teachers.[1] But, as the Bolivia report indicates, one of every four teachers working at the preschool level has no special training for working with young children.

Lack of fully trained personnel, and resources to train them, is a problem throughout Latin America. Thus, the new style of personnel use (sometimes called "differentiated staffing") being applied by JNJI and ICBF holds some promise of being a realistic alternative in the struggle to reach larger numbers of young

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[1] These are normal school graduates, by and large, not university graduates.

children in need of services. There has been some criticism of the greater use of paraprofessionals as teachers, particularly with reference to the quality of the educational program. But the disadvantages of using paraprofessionals may reflect a lack of adequate training and in-service support, rather than an inherent problem.

One seeming advantage of paraprofessional use is the fact that the paraprofessionals tend to come from the lower and lower-middle classes, and thus can potentially identify more closely with the needs and values of the children and their families. It was noted by the investigators in all three countries that many preschool teachers coming from the universities are from the upper classes of their societies. They do not have first hand acquaintance with the problems of poverty and its effects on children. This could explain why the problems of poverty families are often blamed on the families themselves--some cultural deficiency--rather than on social-structural inequalities in society.

Except where they have worked as paid paraprofessionals, the use of parents as personnel, particularly as teachers, has been extremely limited in all three countries. There is no tradition in Latin America of parent involvement in the classroom. In addition, many parents (particularly mothers) of poor children have other children to attend to, or must work to support the family. The possibility of significantly greater use of parents as personnel is questionable.

With respect to the question of support personnel--nutritionists, health workers, counselors--the structures of Chile's JNJI and Colombia's ICBF appear to be more conducive to incorporation of such personnel than the structures of the Ministries of Education in all three countries. The former organizations rely more on "horizontal" teams, working at the program level, and less on a vertical structure which leaves the teacher isolated. This team approach is very promising as a way of dealing with the multifaceted needs of young children living in poverty.

One interesting finding in all three countries is the lack of adequate mechanisms for in-service training of preschool personnel. This lack is particularly harmful for paraprofessionals, but it also affects teachers transferring from the primary level (not too uncommon) and teachers who have been working for years with outdated pedagogical ideas. In-service mechanisms are particularly important at the preschool level, because of new demands on preschool teachers (e.g., working outside the classroom with parents and community, helping to diagnose health problems of children).

F. Educational Curriculum

In all three countries there exists what is called an "official program". This program, developed within the Ministry of Education, generally consists of a series of broad objectives indicating the values and behaviours to be inculcated in children, and a series of developmental objectives, based more or less on expected norms of behavior/ability for young children at different ages.

At the pre-primary level, objectives tend toward preparation of children for first grade. At this level, also, the tendency is for objectives to be focused on academic abilities; this is especially true in the year commonly called "transición".

In Chile and Colombia there has been a recent tendency to use developmental theory (norms and guidelines) from the United States and Europe (in particular Piagetian theory and Gesell's norms). Expected behaviors and abilities within a certain age range are translated into concrete behavioral objectives and then into suggested pedagogical activities, or experiences for young children. Nonetheless, the psychological basis for curriculum has no counterpart in a practical pedagogy--how the classroom teaching-learning situation should be structured.[1] This lack was found to be common in all three countries, and to some extent was not even viewed as a problem. As mentioned in the Chile report, the pedagogical orientation of classroom teachers is to a large extent dependent on individual inclination and previous training.

It is argued in all three countries that the official curriculum should be adapted to local realities. The curriculum itself is not viewed so much as an operational plan as a framework within which plans can be developed. This leaves a good deal to the initiative of local-level teachers and administrative support staff, and may pose a problem as paraprofessionals take on more teaching roles. (In Chile and Colombia, the JNJI and ICBF are required to use the official program developed by the Ministry of Education, whose curriculum developers may not always be mindful of the program development strategies of these agencies.)[2]

Evidence from Chile, Colombia, and Bolivia suggests that conscious application of particular pedagogical models is very

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1 Exceptions to this generalization can be found. For example, in Chile there is experimentation with the Cognitively Oriented Curriculum as a pedagogical basis for activities.

2 Currently, ICBF and the Ministry of Education in Colombia are working together to develop a joint curriculum.

limited. It is not at all clear that one pedagogical model should guide all preschool education in any country. But in terms of application of curriculum--official program--at the center and classroom level, any set of objectives becomes much more powerful within the context of a consistent framework for student and teacher interaction. In this type of setting all the components of curriculum--including materials, classroom structure, student-teacher and student-student interaction--reinforce each other.

Common also to all three countries, but particularly relevant to Bolivia's situation, is a lack of serious consideration of the socio-cultural contexts in which early childhood education programs are being developed. The official programs in all three countries reflect the thinking of psychologists concerning the development of the individual child, but not questions of cultural and ethnic identity and language. This lack is particularly significant in Bolivia, where two thirds of the population are either Quechua or Aymara, and hundreds of thousands of young children speak little or no Castellano.[1] A basic question remaining to be addressed in Bolivia is whether preschool education should serve as a vehicle for acculturation of Bolivia's Indian population, or as a vehicle for ethnic affirmation, forming one small part of a national movement to realign Indian-Spanish relations.

In all three countries, but particularly in Bolivia, there is an inadequate supply of educational materials in most early childhood classrooms. This problem is not uniformly serious--in many private centers and public centers in the larger cities there are enough materials for children. But it is often in the preschool centers serving the poorest children--in marginal urban and rural zones--that educational materials are in short supply.

Lack of materials has one unplanned advantage, however. It has led, in individual cases, to greater use of teacher-made and locally constructed toys, games, blocks and puzzles. These are often inexpensive and very creative, and can be made by parents who could not otherwise afford educational materials for their children. To some extent, locally constructed materials are also culturally more appropriate, being sometimes based on local games, animals, work materials, etc. The potential use for locally constructed and teacher-made materials is probably greater at the preschool than at other levels of the educational system.

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[1] In a recent household census it was found that 53.7% of Bolivians speak Spanish at home, 26.8% speak Quechua and 18.6% speak Aymara.

G. Planning

The content and extent of plans for early childhood education in the three countries vary widely, the processes involved in planning less so. Of the three, Chile appears to have the most clearly laid out plans for the next few years in terms of national priorities for types of programs to be developed and target populations reached. In Colombia, as the Colombia report mentions, there is no one national planning group or mechanism for early childhood education, although ICBF, through Law Nº 27, probably has the central responsibility for strategic and target-population planning. In Bolivia, while there are quantitative projections for increase in pre-primary coverage, there do not appear to be any strategic plans.

The contents of available planning documents from Chile and Colombia suggest a targeting of effort in those two countries toward the poor, in Chile toward the rural poor as top priority, followed by those children living in extreme proverty in urban areas; in Colombia toward the rural poor (through ICBF's regional offices), and the marginal urban poor in Colombia's rapidly growing slums and urban squatter settlements. Plans in Chile also divide responsibility by age with the JNJI and the Ministry of Education responsible for children 2-6 (the Ministry 4-6), and National Health Service responsible for those 0-2 years of age.

The process of planning is generally centralized in all three countries, decision-making being the most clearly centralized in Chile and Bolivia, where officials in the Ministry of Education make all major decisions. In Colombia there appears to be some independent planning at the regional level by universities, ICBF's regional offices, and pilot program developers. Also the Ministry of Education and ICBF make separate plans.

In Bolivia, a country still two-thirds rural, with a population scattered over very difficult Andean terrain, effective planning at the preschool level is constrained by a lack of infrastructure to implement plans. One tentative solution has been to eliminate the preschool level per se in rural areas, and integrate it into a basic cycle. (Distinctions between pre-primary and primary in rural areas based on age have always been somewhat arbitrary anyway.) Planning in Bolivia has thus been shaped by ethnic and geographic realities to a greater extent than in Chile and Colombia.

H. Evaluation

Evaluation of national plans, national programs, progress of children in individual classrooms, and pilot programs has not been of uniform importance for the three countries examined in this study. Chile, with its generally unified national plans, seems to be concerned with macro-effects; Colombia and Bolivia appear less concerned. In both Chile and Colombia there have been a number of pilot programs with evaluation components, and in Bolivia there is at least one (Padres e Hijos).[1]

With respect to national programs, there have to the present been no efforts in any of the three countries to evaluate overall program effects. At the classroom level there are both standardized [2] and locally constructed instruments (e.g., checklists for student completion of objectives) available, but these instruments have not been consistently and widely applied. Chile has used standardized instruments to a greater extent than the other two countries, because in Chile these instruments are used to control promotion.

The data base of the Ministry of Education programs consists mostly of such information as how many children are enrolled, how many teachers are working, etc. Reports from teachers and local supervisors to the national level form the remainder of the data base; these reports are generally quantitative but usually include an impressionistic element describing progress and problems.

A good deal of interesting information has emerged from evaluations of various pilot programs in all three countries. (Although these evaluations are often conducted under difficult field conditions, pilot program developers have recognized the importance of a data base and some measure of control for examining program effects.) The problem at present appears to be knowing what to do with this information, knowing how to use it for planning future programs.

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1 This program is considered to be as much a social, community development effort as a strictly educational pilot program.

2 By "standardized" we mean constructed by specialized teams at the national level, to record student abilities in general and progress on particular objectives. See Chile report, discussion of evaluation.

A common feature of classroom-level evaluation in at least Chile and Colombia is periodic measurement of children's height and weight. This forms the basis for evaluation of the nutritional and health status of the children. In the JNJI and ICBF programs and in pilot programs, there do seem to be some more detailed efforts to examine the nutritional and health status of the children.

Constraints on evaluation in all three countries are numerous. Within the national programs in particular, lack of personnel and resources, lack of concretely defined goals, and diversity in quality of program activities at the local level have made program macro-evaluation difficult. Also, national programs in Chile and Colombia have just recently embarked on new paths, with new mandates to fulfill. At the local level, many teachers appear to have their hands full just coping with day-to-day operations.

Chile, and to a lesser extent Colombia, appear to have begun the process of building a data base upon which to base future plans and strategies at the national level.

The tension in the three countries between the desperate need of large numbers of children for immediate intervention to overcome the effects of poverty, and the need to develop effective and efficient strategies to attack various manifestations of poverty, is demonstrated in an ambiguity toward the evaluation issue. While aware of the importance of evaluation--both formative and summative--as an important instrument for controlling program quality, many policy-makers and program planners seem to feel that it is secondary to the process of delivery of services per se.

I. Some General Issues

The limits of this comparative examination have been set to some extent by the distinctive socio-economic, cultural, and political realities in which preschool education is functioning in Chile, Colombia, and Bolivia. In this section, some of the contextual correlates of the development of preschool education in each country will be discussed briefly, with the purpose of ascertaining which factors may influence trends in each country. The assumption is made that there are both context-specific factors and universal factors operating in all three countries.

Because preschool education has been historically an urban phenomenon in Latin America, it is likely that the degree of urbanization influences the development of a national preschool network. Chile being the most urbanized of the three countries,

has also demonstrated a longer historical interest in preschool education at official levels. Colombia has been urbanizing rapidly, if chaotically, and as the Colombia report states, the sixties--a period in which effects of urbanization began to be apparent--brought a surge of interest in services for young children. Interest in preschool education in Bolivia--still largely a rural country--has yet to make itself felt in any significant fashion.

Interest in attacking malnutrition in young children, apparent on the part of the governments of Chile and Colombia, also appears to have had spin-off effects on preschool education. Chile's national milk program of the late sixties and early seventies, and the primary-school feeding program, created a corps of social scientists and interventionists who stimulated interest in early educational intervention. In Colombia, ICBF has expanded its mandate from basic care and meeting physical needs to developing educational programs. These natural extensions of action from nutrition to multiple intervention are worthy of examination as one approach to expansion of early childhood education throughout Latin America.[1]

As preschool education develops in Bolivia, decision-makers in the country will be faced with a set of factors unique to the three countries examined in this report, but pertienent also to Perú and Ecuador. First of all, rugged geographical features of the Andean region raise questions regarding the most effective strategies for infrastructure development and expansion of services. The delicate ecological conditions of altiplano, highland mountainsides and valleys call for intervention strategies that do not radically alter the socio-cultural system adopted by the Indians over hundreds of years to assure survival. Child-rearing strategies have proven in many parts of the world to be functional adaptations to environmental threats and stresses. This is true also in the Andean highlands, and must be taken into account as plans are made to develop educational strategies for parents and young children. Finally, the previously mentioned issues of cultural policy (toward acculturation or cultural pluralism?) and language policy must be part of the decision-making process when Quechua and Aymara populations are involved.

Colombia is faced with a problem common to all but a few Latin American countries (Chile being one of the exceptions), and one that will inevitably affect future development of pre-

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[1] Two questions then arise: Can supplementary feeding programs be expanded into educational programs? Can supplementary feeding infrastructure be made use of?

school education. This is the very high birth rates and declining infant mortality. About twenty percent of Colombia's population is 5 years old or younger; 25 percent is 6 years old or under. An available data indicate that pregnancy rates are five times higher among low-income than among high-income women. (The situation is very similar in Bolivia.)

How will Colombian planners cope with this trend, in terms of preschool services? What strategies can be evolved that will help increase coverage above the present extremely low levels? It must be noted again that only 5 percent of Colombia's young-child population is enrolled in preschool programs, and of that 5 percent the majority are from the middle and upper class. The example of Colombia is not unusual. The question of numbers reached becomes ever more important as Latin America's preschool population grows from the present 80 million to about 150 million by the year 2000.

One possible solution to the problem of coverage is suggested by Chile's strategy of defining clearly the extent and location of the young-child population living in extreme poverty (through the Mapa de Extrema Pobreza). This solution suggests that children most in need[1] must be identified and targeted for services. Chile is the only Latin American country that has thus far defined its poverty population in this manner. But as prioritizing of target populations for services becomes more crucial in countries like Colombia, the Chilean model might prove useful.

A number of other non-educational factors like the ones discussed above for Bolivia and Colombia have influenced, and will in the future influence the development of preschool education in the three countries. Most of these are internal to the three countries--extent and type of economic activity of women, income and resource redistribution policy, general health and nutritional status of the population, changing family structures. A few are external--international agency interests and funding patterns, the role of foreign technical consultants, the influence of developments in neighboring countries.

It appears that no one set of contextual factors operates in all countries, and that the operating factors influence each other. In Bolivia, for example, informal childcare networks that have operated effectively for generations in the rural

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[1] Generally by socio-economic criteria.

areas may no longer work as women become increasingly involved in urban marketing and ambulatory vending. Choice of income redistribution strategy in Colombia--actively being considered at the present--may partly determine funds available at the preschool level.[1] In both countries the poor nutritional and health status of the young-child population will inevitably influence the types of programs developed.

Certain broad macro-educational factors, some discussed in previous sections of this study, also interact with the noneducational factors to determine trends in early childhood program development.

The locus of administrative and financial control for early childhood programs in the three countries has had some effect on the pattern of programs developed. Programs under the control of the Ministry of Education in all three countries have tended to be downward extensions of primary education, resembling in format the formal primary system. There is a proposal afloat in Chile to apply one basic model to the needs of poverty children throughout the country. The question of whether this model, with its fairly extensive human and financial resource requirements, is flexible enough to be applied to contexts of scarce resources--marginal urban and rural communities--remains unanswered.

The socio-geographical diversity of the Bolivian setting would seem to call for a variety of individually tailored strategies. Yet in Bolivia, almost all educational decision-making and control remains in the Ministry, and it is questionable whether flexible enough strategies can be evolved by that agency; the historical tendency is clearly for Ministries of Education to be very ill-suited to strategies of planned diversity.

Although in Colombia there continues to be a variety of loci of control for administration of early childhood education activities, the tendency is toward greater centralization, under ICBF. The question in Colombia is, can ICBF support the apparent diversity of strategies that have emerged, or will its principal model, the CAIP, begin to supersede other efforts, such as those

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[1] Colombia's Law Nº 27, under which all public and private enterprises contribute 2 percent of their monthly payroll to ICBF for support of its early childhood education activities, provides an example of an income redistribution measure designed to aid workers in these industries and, to a lesser extent, the under-and unemployed.

ongoing in Cartagena? The tendency toward centralization of administrative authority in the ICBF may assist in the transition of preschool education in Colombia from a largely private system supporting middle-and upper-class children, to one serving the rapidly growing urban and rural poverty population.

J. Conclusions

Comparison of the extent and nature of development of the national preschool networks in the three countries chosen for examination offers an example of the wide variety of factors influencing preschool education in Latin America. While the main concern of this chapter has been with educational factors, it is clear that non-educational factors at least indirectly affect decision-making at this level of the education system.

To an extent, the challenge in Colombia and Chile has been to take the existing network of uncoordinated, diffuse preschool activities and turn it into a instrument of social development policy and action. Chile is further along than Colombia on this path; but the trend in Colombia is toward more focused action. Bolivia, with a good part of its population continuing to live near subsistence levels, has not yet turned to preschool education as an instrument of social development.

The potential effectiveness of many of the pilot programs ongoing in Chile and Colombia, and to a lesser extent Bolivia, is beginning to be recognized within Latin America and by international agencies. Some of the features of these programs--reliance on community-level human and financial resources, sensitivity to local values and lifestyle, direct work with parents--speak directly to the constraints within which preschool education in Latin America must develop.

Many specific issues within each of the broad features discussed in this chapter--priorities and objectives, organization, educational curriculum, personnel training and use, etc.--remain unresolved. Will control of preschool education in Chile and Colombia eventually reside within or outside of the Ministry of Education? Will education be the central component of preschool programs, or will it be secondary to physical and custodial care? Are present levels and content of training of preschool teachers appropriate? How will Colombia, Chile and Bolivia ever be able to reach more than a small percentage of the preschool population in need of services? Some of these issues will be discussed in the chapter on Key Questions. This comparative examination makes it clear that (1) preschool education as a system is just beginning to develop in the three countries, and

(2) there are no hard and fast formulas for guiding decisions that will have to be made--the institutional, socio-cultural, economic, and political contexts of each country are at least somewhat distinct, and will require at least somewhat distinct strategies of intervention.

I am aware that there exists a group of development psychologists that contends that 80% (to cite a figure) of a child's cognitive/social development patterns are determined by experiences he has before reaching first grade. I don't know how much of a consensus exists on this in the profession, but the present programming of funds for education by international development agencies most certainly ignores whatever may be there... We might be moving in the right direction... Ten years ago our emphasis was on producing University graduates, and this has now been replaced by a concentration on a basic elementary education for the poorest masses. Who knows, in ten years more we may be looking at the critical early years.

- An international agency official commenting on the education policy of the development community (January, 1978)

IV. International Agencies and Preschool Education in Latin America

INTERNATIONAL AGENCIES AND PRESCHOOL EDUCATION IN LATIN AMERICA

Introduction

Since the beginning of the First United Nations Development Decade the "problem of development" has undergone a fundamental re-conceptualization. Throughout the decade of the sixties development planners and policy makers in international agencies and various governments assumed that problems impeding national development could be solved by raising GNP and increasing economic productivity. Development was viewed as an economic problem, requiring investment in the economic sector.

Yet, by the early seventies, even in countries where significant economic development had taken place, there was often no substantial reduction of poverty for the great majority of the population (Sewell, 1977, pp. 147-79). Planners and policy makers at the international and national levels began to view actions aimed directly at the social manifestations of poverty--malnutrition, disease and infection, educational waste through failure to enroll, repetition, and dropping out, lack of general social services, lack of employment opportunity--as investment in future economic development, and as a foundation for assuring sustenance of economic gains in the present. Thus, reduction of poverty and its manifestations has come to be viewed as investment in the future of a society, as well as social welfare for the disenfranchised (Haq, 1974; Selowsky and Taylor, 1973; Singer, 1972).

Among those least affected by development efforts of the sixties and early seventies were women, particularly mothers, and young children. While conscious of the needs of these two

population groups, planners and policy makers did not view failure to meet those needs as a central obstacle to national development. This is no longer the case.

In response to greater emphasis on the role of social problems in the process of national development, international agencies have developed a number of new priorities and strategies. These are reflected in by now well known catchwords. Within the United Nations system there has emerged a commitment to meeting "basic human needs" through "integral services". UNESCO has developed a framework for its programs called "lifelong learning". UNICEF is seeking to help communities develop strategies for providing "basic services". The World Bank, AID, and various foundations are now committed to "human resource development" and meeting the needs of the poorest majority. And almost all have become greatly interested in the role of women in the development process. Various agencies and institutions also emphasize particular substantive priorities: nutrition, health, education, family planning, employment, housing, rural development, urban development, etc.

How does early childhood education fit into these priorities and strategies? First, it must be stated that few international agencies have well defined policies with respect to supporting early childhood education program development. Some agencies, like UNICEF, have hypothesized that early childhood education might be an excellent vehicle, or entry point, into communities, for developing broader integrated services to young children and families. Others sense that early childhood education might be a vehicle for attacking other social development problems (primary education wastage, malnutrition). No agency yet seems sure of where it wants to go with early childhood education. What has been expressed, either explicitly or implicitly, is that there is a role for early childhood education within broader social development strategies.

For example, UNICEF has developed the basic services (or integrated services) approach to solving community level development problems. Community members identify what they view as their highest priority needs, select fellow community members to receive short training courses in the content areas involved, and then deliver basic services to their own communities. The community receives technical and program support from government agents working within the already existing social sector infrastructure. Priority areas in Latin America

would be maternal and child health, child nutrition, education and training, water supply development, and integrated (multisectoral) programs for young children.

UNICEF has used existing or newly created early childhood education programs as springboards for launching services in all the above areas, or in priority areas chosen by the community. The assumption behind the UNICEF approach is that individual needs of young children cannot be isolated; there is a network of interacting problems affecting young children, all of which influence each other. A program in any one area can be the entry point into the community.

Within UNESCO, early childhood education is viewed as part of a process of "lifelong education., first conceptualized in the FAURE report (1972), Learning To Be. Lifelong education is viewed by UNESCO as the principle upon which all educational plans should be based. The idea is that societies must plan the development of nationwide learning systems (to use Frederick Harbison's words), so that all citizens have access to some kind of deliberate, planned educational activity. This would include young children, potentially through formal preschool programs, maternal and child health centers, mother's clubs, home based group and parent education programs, etc. The important idea is that educational planners consciously plan for young children and infants, as well as those six years old and older.

From comments made by UNESCO staff in interviews with the authors of this report, it is apparent that there is a feeling within UNESCO that the organization and support of early childhood education should be the responsibility of communities themselves. This idea is stated in the Faure report (1972, p. 191):

> Education for preschool children (as from 2 or 3 years old) must then be organized on a free flexible pattern, finding the best ways of getting families and local communities to work together and share expenses.

As part of its current research efforts in lifelong education, UNESCO is examining the role early childhood education plays and might play in Latin America's nationwide learning systems. One UNESCO official suggested that it is at the early childhood level that the interdependent nature of the problems of Latin America's poor can most clearly be seen. Thus, the nationwide learning system might have an intersectoral foundation, rooted in nutritional and health, as well as

intellectual and vocational needs. Clearly, though, as the foundation of lifelong education, early childhood education must be an integral element in national, regional, and community level educational plans.

Two distinctive priorities of both UNESCO and UNICEF, which are tied to development of early childhood education, are (1) meeting women's, in particular mothers', needs, in terms of child care, vocational training, and parenting education; and (2) providing a minimal, or basic, education to those children denied access to the formal school system (including preschools). With respect to the former priority, it is suggested that one approach to early childhood education is to work directly with parents, particularly mothers, in helping them to be better able to meet their children's needs. Also development of early childhood programs is viewed in the context of freeing mothers to engage in economically productive activities. With respect to providing basic education, the question is how to structure educational activities, using available resources, so as to meet the minimum essential learning needs of children in a particular socio-geographic setting (see Coombs, et al, 1973, pp. 13-20).[1] Early childhood education thus must also be conceptualized within the context of "basic education".

The World Bank, through a series of policy papers, has began exploring early childhood education (as an issue) in the context of human resources development, and as one alternative form of investment in the future economic development of developing countries. The argument is that the potentialities and abilities of adult human beings are strongly influenced by their experiences in the early years of life. Since the central goal of national development is optimal development of human resources, then investment in programs assuring adequate early experience and meeting of developmental needs is a clearly justifiable investment.

Nonetheless, investment in early childhood education as one form of investment in human resources development has been extremely limited among those agencies, like AID and the World Bank, using this approach to solving development problems. Too many questions remain unanswered and too many other problems appear to be more pressing. In particular, a number of

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[1] One program supported by UNICEF, the "bench schools" of Cartagena, Colombia, started out years ago as a preschool program. Yet, currently, many of the children in these "schools" are 6-12 years of age, children denied access to formal primary education.

variables in the environment during the later childhood and adolescent years have the potential to negate or offset the effects of early intervention.

Factors Influencing Decision Making of International Agencies: Constraints on Investment in Early Childhood Education

There are a wide variety of reasons why international agencies have not been investing in and supporting early childhood education in Latin America at a significant level. Some of these are simple and concrete: many agencies have other foci, are not interested, or do not feel competent to work in this area. Others reasons are more complex and relate to the historical role of early childhood education in Latin America, perceptions of what role it might play in the future, and lack of a conceptual framework in which to develop policy.

First, it must be noted that some officials of international agencies view early childhood education as a luxury for the wealthy, a form of education that is out of reach for the majority of Latin America's young children. When they think of early childhood education they think of expensive buildings, toys and materials imported from Europe and the United States, and wealthy young women teachers. This perception is based on the role early childhood education has played in the past in Latin America.

Some officials believe that the nutritional and health problems of Latin America's young children should have a higher priority when plans are being made to intervene at the early childhood level. The majority of officials interviewed by the authors of this report viewed malnutrition as the most serious problem affecting young children in Latin America. It was argued that educational programs cannot be planned for until physical needs are met. It was also suggested by a few officials that nutrition education for parents was a better investment than nutritional or educational intervention directly with children.

It was also argued that children's needs must be met in the context of the family and community. It is the responsibility of the family to raise children, and intervention programs should not be taking children out of the family. This concern has particular relevance in Latin America and other regions of the world where government is not yet intervening widely to provide services normally provided through informal community networks of child care.

A related concern of a few international agency officials was that many families need their children at home for economic reasons. This was expressed as a general concern, with no concrete notion of what roles 3-5 year old children actually play in many settings. One official noted, for example, that development planners should not try to take away what people have (the system they've developed for survival) unless practical and realistic substitutes can be found.

It was argued by some international agency officials that the problems related to universalization of primary education, and making both levels more efficient and effective have not yet been solved, therefore this is not the time to invest in early childhood programs. Available resources must go to improving available educational programs; scarce resources should not be further stretched. In practical terms it was suggested that formal educational systems in Latin America lack both infrastructure and organizational ability to absorb new programs at this time.

Generally, most Latin American countries are seen as having so many pressing problems requiring immediate attention, that in terms of priorities early childhood education must remain low. Problems mentioned include unemployment, high birth rates, chaotic urbanization, grossly inefficient educational systems, inequitable land tenure systems, unevenly distributed health services, and malnutrition. It is not perceived how early childhood education could affect any of these problems. Even when early childhood education has been considered as an investment option, it has usually ben dismissed.

The authors of this report found that the most pervasive constraint on expansion of investment in early childhood education is a narrowness in conceptualizing the forms early childhood education can take, and a lack of knowledge about specific programs that have been able to reach children in various socio-geographic contexts. With respect to this latter point there is a general lack of knowledge, probably due to lack of data, on potential short- and long-term program effects of particular intervention strategies. One official expressed a concern others felt but expressed more indirectly. He noted that resource constraints will prevent preschool from ever reaching a majority of children in need in Latin America.

The general feeling among international agency personnel interviewed is that we must wait until more is known about the kinds of programs that are most effective, in order to be able to invest sensibly. No one mentioned how international agencies and Latin American policy makers and planners might attempt to reach this point.

The Growth of Interest in Early Intervention and How Early Childhood Education Fits In

Those few international agencies that have conceptualized a role for early childhood education in social development strategies, have generally viewed it within the context of a broader approach to meeting children's needs. This broad approach has been characterized as early intervention. It is clear from the opinions related in the preceding pages by international agency officials, and from a growing body of literature from international (WHO, UNICEF, FAO) and private agencies, that the problems of young children in Latin America and other developing countries are multidimensional, complex and inter-dependent.

It was argued by the agency personnel interviewed that (1) single-sector programs for young children are inadequate and inappropriate, and (2) when sectoral (nutrition, health, education) plans are made, services for young children become immersed in bureaucratic waste, and only a small percentage of funds slotted to meet children's needs reach them. The implication for early childhood education is that it must be conceptualized within a broader framework of programs designed to attack specifically a number of problems of young children. As UNICEF officials noted, early childhood education may be an excellent base from which to develop multisectoral programs. But the educational component itself must be only one of many pieces of a broader strategy, based on a holistic approach to young children and their families.

What International Agencies Want to Accomplish Through Investment in Early Childhood Education

Just as the social development strategies selected by various international agencies vary, so do their goals with respect to investment in early childhood education. Reasons vary from the purely economic-expected returns on an investment- to the largely humanitarian-the demand for social equity.

One goal, expressed by AID officials and in documents of AID and the World Bank, is to prepare young children to be better able to take advantage of formal schooling, or other primary level educational programs.[1] This rationale is in some

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[1] One AID official expressed the ironic concern that if you develop too good an early childhood program, you develop expectations among parents that can't be met by most primary school programs!

ways similar to that for Head Start in the United States. First, the rate of educational wastage in Latin America is very high, and early childhood programs, appropriately structured, can attack some of the causes of this wastage. Secondly, early childhood programs can be vehicles for providing basic education to children out of reach of formal primary schools.

A secondary goal of AID in this area is to seek low cost, nonformal strategies of meeting basic educational needs of children, and related needs of parents. There is a sense that this is not going to be an area of great future investment. Thus cost-effective strategies of reaching young children and families must be worked out. A common way of expressing this goal in some Latin American countries is "to capacitate communities" to better be able to meet the needs of their young children.

UNICEF officials expressed an interest in giving young children basic skills necessary for success in their environment. In this regard, there is a resistance to preparing children for primary schooling that may be dysfunctional for the large majority of Latin America's poor children (not inevitably, but as presently structured), and out of reach for the rest. This UNICEF goal is in line with the "basic services" strategy in which communities define their own priorities for problem solving and educational training.

Most agencies have expressed an interest in the needs of working mothers (using a broad definition of employment all poor mothers in Latin America are working mothers); and one goal of investment in early childhood education is certainly to free mothers to work productively outside the home, or to provide more support for those already working outside the home. (One interesting strategy expressed by a UNICEF official was to develop early childhood programs that have as one component the training of mothers in income generating skills.)

A corollary concern of some officials is to seek ways in which the family, as primary educator of young children, can become a more effective "human resource developer". One of the functions of the family is indeed the preparation of children to become economically productive members of their communities, and the broader society. One conceivable aim of early childhood programs would thus be to work with parents on parenting skills conducive to this goal.

Actual International Agency Support for Early Childhood Education in Latin America

As has been mentioned, there is at present only modest international agency activity directly focused on support of early childhood education. There has nonetheless been financial and technical assistance for a number of pilot projects with early childhood education as a central or secondary element. There has been some support for mass media work at the early childhood level (especially in development of television programs). And there has been financial support for agencies doing research or running programs at this level.

It is important to note that only a few international agencies have staff members with expertise (or specialization) in early childhood education, or more than cursory knowledge of what is being done in the field. A few officials interviewed responsible for planning or analyzing host government plans in education did not know of activities and persons working in early childhood education in their countries of responsibility. This lack must inevitably impede ability to work in this area or make planning investment decisions.

A few international agencies are actively supporting research and programs in early childhood education at the present time. The Agency for International Development is funding a pilot program in Perú using Project Portage's home based methodology in which parents, through "instruction, modeling and reinforcement, learn to be more effective teachers of their own children" (AID, 1976).

The model used by Portage will be compared with other approaches to early childhood education ongoing within Perú's national program (Initial Education), and a conceptual base of data discussing the costs, strengths and weaknesses of selected early childhood methodologies should emerge from the effort.

UNICEF does not have a budget or program specifically set aside for early childhood education, but it is funding a number of local program efforts. The most prominant program being supported is the Puno Non-formal Early Education Project (PROPEDEINE). Also being supported are the "Escuelas de Banco" -bench schools- in Cartagena: and the Preschool Child Development Center at the University of the West Indies. Some smaller early childhood education efforts are incorporated into UNICEF's integrated rural development programs in Bolivia, and Panamá, and a few other countries.

The Ford Foundation, through its policy of supporting educational research institutions and general social development institutions, has supported a number of pilot programs with evaluative elements. Ford has been particularly active in Colombia, where it has provided technical and financial support to two major research projects examining effects of nutritional and educational intervention (the project of the Human Ecology Research Station in Cali and the ICBF project in Bogotá) and to a few smaller scale, but nonetheless significant, pilot efforts (such as the Centro Educativo de Educación No-Formal program, Niños Inteligentes). Ford is also funding a research project examining the nature of deprivation in young children in Latin America, and programs currently operating, or planned, attempting to meet young children's needs.

Two other international agencies have played smaller roles in supporting early childhood education, but have nonetheless had some impact. One is the Inter-American Children's Institute of the Organization for American States. This institution has supported conferences and courses around young child themes in a number of Latin American countries, and also published papers and books. The second is the Bernard Van Leer Foundation of the Hague, Netherlands. This Foundation which has been supporting early childhood education in developing countries since the sixties, has provided support to a number of interesting pilot projects in Colombia, Venezuela, Brazil and other countries.

Other international agencies, such as CARE, Catholic Relief Services, and Foster Parents Plan, indirectly support early childhood education programs in Latin America countries through in-kind contributions of food, building materials, educational materials and health supplies. These agencies have no policy or plans of their own to support the development of early childhood education in the countries in which they operate. They appear to be simply responding to requests for material support from host countries.

Children's Television Workshop has since 1972 been involved in efforts to adapt its Sesame Streeet series to the needs of Latin America's young children. Starting with "Plaza Sesamo" in Mexico City, there are now variations of Sesame Street in a number of countries. While effects of and reaction to Sesame Street have varied (Palmer, Chen, and Lesser, 1976), the wide adoption and (tentative) results of the program in urban areas indicates that those agencies working with and through mass

media strategies will have a role to play in the development of early childhood education in Latin America.[1]

In general, the total actual effort of international agencies in Latin America in supporting development of early childhood education is minimal, especially in contrast to the hundreds of millions of dollars being spent to support basic needs in other social development areas.

When asked about their plans for the next five years, none of the 25 international agency officials interviewed were able to cite any specific plans of action to support early childhood education, and some answered "none".

International Agency Views of Program Implementation Problems and Characteristics of Effective Programs

International Agency views of implementation problems in getting early childhood education plans into action ranged across a wide spectrum. Most problems cited were those common to all kinds of development projects. A few are unique to early childhood education.

Perhaps the broadest implementation problem mentioned was one voiced by UNICEF officials: lack of a concrete young child policy. This leads to fragmentation, duplication and lack of mutual support of services; programs that generally do not reach those young children most in need; and efforts that do not last longer than the length of external funding. It also makes it easier for governments not to target specific funds to meeting young children's needs, as they are supposedly met through individual sectoral policies.

Other common problems mentioned were: lack of trained personnel; lack of materials and physical space to our programs; lack of a tradition of parent involvement in educational programs (but most important at the early childhood level); lack of coherent theoretical framework for program development; over-reliance on North American and European curricular models,

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[1] This is not to deny the constraints on widespread application of such expensive educational efforts as Sesame Street, or to suggest mass media as the only logical way of reaching millions of children; only to suggest a legitimate role for mass media. Constraints may be especially apparent in rural areas and in communities where poverty is particularly harsh. Nonetheless, the key is in adapting the media strategy to the context in which it will operate.

evaluation instruments, etc., often inapplicable in many marginal urban and rural settings; too many psychologists working in the area; not enough people with training in other disciplines, bringing in other bases for program development; too much bureaucratic structure, causing the majority of funds slotted for a program to never reach the children; tendency for many early childhood programs to be custodial in nature; lack of intersectoral cooperation at the operational level (including "rigid" budgets that cannot be adapted to the needs of early childhood programs); and a generally low level of awareness among both professionals and the population at large about the importance of adequate experience in the early years of life.

When queried about what hypothetical characteristics an effective preschool program might have, international agency officials offered a variety of often sharply contrasting answers. For example, one official stated that preschool education should be geared to the elementary system preparing children for first grade, and shouldn't create unrealistic expectations (for educational quality?) in young children. Another official felt strongly that a good program prepares children for success in their environment, and does not "react" to what may be a dysfunctional primary system.

A few officials noted that early childhood programs should have strong, highly structured basic skills components and should teach children to read. These officials, even more narrowly than those concerned with readiness for first grade (which includes social skills) view preschool education as basic skills training in reading and writing.

Many officials indicated that good programs would actively involve parents (or be aimed directly at parents); would make full use of available community resources (and wouldn't be dependent on heavy external investment); and should reach children most in need. Also indicated was a strong nutritional component, an evaluative component, a well defined theoretical framework, and respect for the social-cultural context.

Some officials questioned were either not interested or did not know what characteristics an effective preschool program might have.[1] A few felt that early childhood education is a

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[1] The majority of officials interviewed had direct responsibility for working in the education field, including programs for young children.

fuzzy field where issues, strategies and needs are not clear. There is a general feeling that more research needs to be done, to determine potentially efficacious strategies. (Few officials, in describing characteristics of effective early childhood education programs, viewed their potential contribution to meeting non-intellectual needs of young children). Expectations for early childhood education are clearly bounded by traditional views of what early childhood education has been.

Role of International Agencies in Evaluating Early Childhood Education in Latin America

The extent of the evaluative effort in early childhood education by international agencies has been limited by their lack of investment in early childhood programs, and by a lack of tradition of evaluating the programs that exist in Latin America. Two surveys of what is actually being done in the field, the present study and a Ford Foundation study, represent the sum of formative evaluation work being supported by international agencies. A number of pilot programs of Ministries and semi-private agencies have received support, which includes funds for evaluation.

The broad purpose of the present study, supported by the Agency for International Development, is described elsewhere in this report. The Ford Foundation study, directed by Dr. Ernesto Pollitt of the Massachusetts Institute of Technology, is examining the socio-geographic bases of deprivation in young children in Latin America (general effects of poverty, and specific causes and effects of infection malnutrition and retarded intellectual development), current early intervention efforts with education being at least a major component, and factors influencing demand for early intervention. Both studies are focused on providing a data base and guidelines for (1) international agency investment, and (2) policy decisions by international agencies and Latin American governments. Both are trying to map out existing information and information needs for purposes of policy formation.

At the program level, a few international agencies--notably UNICEF, Ford and AID--have provided financial and technical support for evaluation of promising pilot programs. UNICEF has supported evaluative effort for Puno's Non-Formal Early Education Project (PROPEDEINE), the Hogares de Cuidado Diario (Day Care Homes) and the Escuelas de Banco (Bench Schools), both in Cartagena, Colombia and a few other pilot efforts. AID has provided funds for an evaluation of PEOPEDEINE, and is supporting a pilot project being run by Project Portage (of Wisconsin) in Perú that has a clearly defined evaluation component. Ford has indirectly supported

evaluation work, through support of educational research agencies conducting pilot programs with evaluation components (CIDE in Chile, with its Programa Padres e Hijos, CEDEN in Colombia, with its Niños Inteligentes).

None of the educational pilot projects evaluated has been intended to be strictly experimental in nature, and only a few satisfactory instruments for evaluating program success have been developed.[1] Thus, evaluations of most projects have been acknowledged by program directors themselves to be tentative efforts. In the case of UNICEF, some of its evaluative effort has been strictly descriptive. Most evaluation of current programs has also been retrospective, only being carefully thought out in the later stages of a program's development.

Constraints to evaluation , discussed by international agency personnel of agencies more directly involved in program support, are numerous. Among the commonly mentioned constraints are cost, lack of project personnel with evaluation skills, lack of a tradition of evaluating early childhood education programs, lack of a conceptual framework for evaluating programs (including lack of clear program goals and theoretical base) and a resistance among program personnel to being evaluated.

Agency Views of Central Issues

Certain issues relating to the future development of early childhood education in Latin America were mentioned repeatedly by international agency personnel. These issues would be central strategic and philosophical components of early childhood education strategies developed in Latin America.

Two issues appear to be central concerns. One is the need for integral involvement of parents in any program for young children. The second is the importance of meeting the nutritional and health, as well as the educational needs of young children. There is a strong feeling that the family, having the greatest influence on the young child's development, should not be "replaced" or substituted for in development of early childhood programs. Also argued is the value of parents as teachers, the spinoff to other siblings when parents gain new skills and knowledge, and the lower cost of strategies using parents as teachers, or aimed directly at parents.

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[1] This is the view of program directors themselves, who feel that none of the standardized tests at their disposal, even normed for target populations involved, have been able to measure the most important effects of their programs.

The second issue mentioned above is reflected in the demand for integrated services, and intersectoral cooperation. Children's needs and problems are interdependent and cannot be sectoralized, it is argued. Given scarce resources it is wasteful for there to be separate programs for health, nutrition, and education.

A third issue of concern to international agencies is the economics of early childhood educational investment. Questions of the effectiveness and efficiency of particular strategies, the short and long term cost-benefit "picture", the value of re-distribution of investment from other educational and non-educational programs, all remain unanswered. As economic "crises" become the normal state of affairs for many Latin American countries, and as international agency funds become less plentiful, the economics of any social sector investment become a major concern.[1]

Related to the economic issue is the concern expressed by some international agency officials that early childhood education should not be developed though heavy external investment, but rather through self-motivated and initiated community level efforts. The strategic tools are (1) rationalization of community resources to better meet young children's needs,and (2) capacitation of community members in the early childhood area. There is an implicit suggestion that early childhood education will never be an area of extensive international agency investment (capacitation of families and communities to solve their own problems).

Another central issue, or concern, of international agencies is to know better potential short and long term effects of programs. This ties in to the economic issue (when choice of alternative investment strategies is present). But it is also important in terms of choosing alternative strategies to support within the early childhood area, and knowing what results can be expected.

Other issues mentioned by a number of officials interviewed were the need to assure that particular program settings offered an adequate physical environment for young children; the need to assure that programs reach those children most in need of services; the need to assure that programs are planned and implemented with respect for local and regional cultural systems; the need to think about distinctive strategies

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[1] The whole economic issue is treated in greater detail in chapter V of this report.

for rural areas; the need to think about how media can be more effectively incorporated into early intervention projects; and the need to assure that preschool programs help ease the transition to primary school for poor and culturally different children.

Conclusions

The overall impact to the present of international agencies in the development of early childhood education in Latin America has been very modest. The only agency largely committed to meeting young children's needs is UNICEF, and within UNICEF's strategy early childhood education per se is only a small component. Other agencies committed to meeting children's needs as a lesser part of total program strategy have worked largely in the areas of nutrition intervention and meeting basic health needs.

The level of knowledge and awareness of early childhood education among international agency personnel is generally minimal. Exceptions can be found --for example, AID has recently hired an official with expertise in the area, and a few other agencies have at least one or two staff members with a knowledge of the field (including the World Bank and Ford Foundation). The fact remains, however, that most agency officials know little about what work has been done in Latin America and other parts of the world, what the important issues are, and what forms early childhood programs can take.

In a broader sense, the impact of international agencies has been limited by lack of a concrete policy with respect to investment in early childhood education. An agency with no goals at this level will generally not be considering significant investment. Early childhood education has simply not been considered by many international agencies in their development strategies.

Lack of international agency impact and interest in early childhood education has to some extent been a reflection of lack of national government interest in this area in Latin America. Recently some Latin American governments have been showing greater interest in and commitment to early childhood programs. This has been reflected in greater interest on the part of international agencies such as Ford, AID and UNICEF in supporting early childhood efforts. The impact of this support, nonetheless, will only be apparent in the future, and only if international agencies follow up on their current developing interest.

THE ECONOMICS OF PRESCHOOL EDUCATION IN LATIN AMERICA

Introduction

Economic theory indicates that, in general, one should continue to invest in a particular opportunity as long as it continues to yield better returns than alternatives. This "rule" of resource allocation applies also to education. Though education at whatever level is a complex social product, and therefore difficult to quantify for economic purposes, in a world where resources are scarce it is clearly valid to look at goals, processes, and returns, and argue that education must answer to economic reality, just like any other sector of society.

In this chapter economic considerations pertaining to preschool education will be explored with the purpose of (1) trying to establish a framework for future economic analyses, and (2) suggesting the most fruitful directions for such analyses. The chapter will be broken down into five sections. The first will examine the economic rationale for investment in preschool education. The second and third will examine the problems and some approaches to costing out and analyzing benefits of preschool education. Section four

V. The Economics of Preschool Education in Latin America

will consist of a cost study of preschool education in Bolivia, Chile and Colombia. Section five will discuss next steps and some of the fruitful directions for future analysis.

Investment in Preschool Education: Some Arguments

In the developing countries, within contexts of extremely scarce resources and a number of seemingly high priority problems competing for these resources, the rationale for investing in early childhood education programs, rather than in other educational programs or other areas of social concern (e.g. family planning, nutrition, maternal and child health), is not clear. Early childhood education has been viewed as an unaffordable luxury, only for wealthy children and their families, of little utility in the struggle to reduce poverty and/or spur economic development.

Yet a body of literature is beginning to grow that complements the findings of the literature on the harmful long term effects of malnutrition, disease and infection, and broad environmental problems, on the development of the young child, with analysis demonstrating the potential long term economic effects of not investing in programs for young children in need of services. One question for policy makers and planners thus becomes: whether not meeting basic developmental needs of young children in need of services will provide an important enough obstacle to national development to justify investment in such services for economic reasons.

The economic justification for investment in early childhood education can be explored using a number of basic assumptions about the goals of socio-economic development as a process. Among the goals that could be considered are (1) the demand for socio-economic equity, (2) the demand for greater efficiency (less wastage) in the educational and other sub-systems of society, (3) the demand for greater productivity and economic output (e.g. freeing women for the labor force; having a larger, well trained labor force); and (4) the demand for future human capital, capable of meeting changing social and technological conditions.

As will be seen in the following discussion, many of the arguments in the literature cut across individual assumptions. For example, a more efficient educational system not only frees investment capital for the economic sector, thereby enhancing productivity, but also leads to a larger pool of human resources, and perhaps enables poorer children to take better advantage of educational opportunity.

Harbison (1973) indirectly provides one philosophical basis for investment in preschool education in his study arguing that "human resources--not capital, nor income, nor material resources--constitute the ultimate basis for the wealth of nations" (p.3). Harbison argues that the goal of national development in developing countries should be optimal development and utilization of their human resources. Singer (1972) puts it similarly when he argues that "the fundamental problem of economic development is not how to create wealth but how to create the capacity to create wealth". (p.12)

If the potentialities and abilities of adult human beings are strongly influenced by their experiences in the early years of life, and if one goal of national development is the optimal development of human resources, then investment in programs assuring adequate experience for young children can be considered a strategy of relatively high priority.

A number of studies examine the potential effects of early childhood education on adult abilities, productivity and earnings, through the measurement of the effects of preschool on children once they enter at the primary education level.

Selowsky (1976) develops an argument for greater investment in early intervention programs based on the assumption that the child's abilities and potentialities when he enters school are the most influential factors in determining how well he will be able to take advantage of the school environment (argued also by Jencks, 1972, in his massive study of the influence of various factors on adult competence in the United States). Selowsky (p. 709) develops an equation representing production of cognitive and non-cognitive performance at adult age (II) as:

$$II = F(A,S)$$

where A is the vector of abilities of the child when he enters the school system and S is a vector of school and non-school inputs the child is exposed to during the years of schooling. Selowsky then argues that the findings of Jencks (1972) and Bloom (1964) permit him to further clarify the relationship as

$$II = A^{X}S^{1-X}$$

Since A not only makes an important individual contribution to adult competence but also "determines the magnitude of the contribution of S." A, then, clearly would have an important influence on adult abilities both on its own and due to its influence on growth of abilities during the later childhood years.

Selowsky then goes on to analyze the components of A: genetic endowment, inputs affecting organic and physical growth, and the general environmental milieu of the child. Investment in integrated early intervention programs can impact the latter two components, and thus lead indirectly to greater adult competence and productivity. Selowsky's analysis does not provide a mechanism for determining how much investment is necessary and in what type of program, nor does it clarify the extent to which pre-primary interventions have a greater impact than primary.

A similar approach is taken by Selowsky and Taylor (1973), who estimate potential earnings profiles of Chilean children beginning life under various environmental conditions. They find that malnourished children are likely to earn considerably less over the years than well nourished children from the same environmental background (a proxy for reduced national productivity). Their findings are based on an assumption of lower initial ability due to malnutrition (a reasonable assumption given the findings in the literature), and less consequent ability to take advantage of schooling (Berg, 1973). They do not even consider such factors as increased susceptibility to infection, and decreased body size.

Selowsky and Taylor argue that inadequate early childhood nutrition, unlike lack of formal schooling, cannot be compensated for later on by investment in on-the-job training or other educational opportunities, because such training is "a much better substitute for a deficit in years of schooling than a deficit in preschool I.Q." (1973, p.30). They suggest, in conclusion, that the cost to a society of not investing in early intervention (at least with respect to malnutrition) is "massive disinvestment in early human capital formation and, perhaps, greatly increased distributional problems with a low income, low productivity segment of the population in the future" (p.30).

Grawe (1978) develops a model of earnings determination similar to Selowsky's. The model is as follows (pp. 66-67):

(1) $A_1 = F_1 (H, G, P)$

(2) $S = F_2 (A_1 H, P)$

(3) $A_2 = F_3 (S_1 A_1)$

(4) $E = F_4 (S, A_2, A_1, H)$

Equation (1) postulates that childhood abilities, A_1, are a function of the home environment, H, genetic traits, G, and preschool intervention, P. Equation (2) postulates that schooling attainment, S, is a function of childhood abilities, continuing home envrionment and preschool intervention. Equation (3) postulates that post-school skills, A_2, is a function of schooling attainment and childhood abilities.

Thus earnings, E, would be a function of schooling attainment, post-school skills, early childhood abilities, and home environment. By acting directly on (1) childhood abilities and (2) schooling attainment, preschool intervention in Grawe's model indirectly affects post-school skills and eventually, earnings.

Simmons (1974) cites evidence that investment in formal education over the last fifteen years in developing countries has not reduced income inequalities or provided pathways to economic achievement to nearly the extent that had been expected. According to Simmons, the research indicates that early, non-school factors (home environment, parental behaviors, nutrition, health) have proven to be more important than later school factors in determining academic and vocational achievement. Policy makers in developing countries, according to Simmons, are now asking if a re-allocation within the education sector can make poverty reduction efforts more effective. As Simmons notes:

> To increase the value of human capital with optimal use of resources will require significantly different approaches than are now being used in most poor countries. The evidence increasingly shows that the early factors which determine cognitive and non-cognitive traits need increased understanding and investment. (p.3) (emphasis added)

Simmons' argument is related to a similar one that suggests that re-allocation of funds within the education sector from higher to lower levels would lead to reduction in income inequality over the long run in a society. This is because investment in higher educational levels benefits only those who have made it to those levels, usually children of families with higher income in the first place. Re-allocation of funds to the lower levels would potentially help low income children have greater access at the primary and intermediate levels. To the extent that preschool programs are deliberately targeted at low income children, investment at this level can contribute to increased equity. However, it is usually those most in need who are the last to be reached by general social service programs. (See Davis and Morall, 1974, p.22).

Moock (1974), taking a slightly different approach to investment in young children, argues that parents who have not been invested in are less capable of investing in their children:

> We find initial support for the proposition that the intergenerational transfer of socio-economic status occurs, at least in part, through a process of investment in early human capital of children. More educated parents spend more time with their children, and this "expenditure" pays off in the form of greater aptitude in school, which leads ultimately to greater economic success. (p.277)

Although the suggestion that educated parents spend more time with their children can be questioned, the use of the time with young children is probably more effective educationally with more educated parents. Moock thus recommends investing in early intervention programs that work with parents and children, since the parent contributes much to the early human capital formation of the child.

Another indirect argument for investment in early childhood education is provided by Brimer and Pauli (1971), Beeby (1966) and Coombs (1968) in their discussions of the forms and causes of educational wastage, particularly via repeating and dropping out. The evidence suggests that educational wastage is greatest (a) in rural areas, (b) for females, and (c) at the beginning of the primary cycle. The causes of dropping out and repeating are complex, some internal to the school system and others external to it, but it is likely that some of them can be influenced by early childhood education programs, appropriately targeted and structured. Reasons for wastage at the beginning of the primary cycle, particularly in rural areas, that are amenable to early intervention efforts are: (a) malnutrition and disease, which cause poor performance and high rates of absenteeism; (b) inability to adapt to cognitive and affective behavior patterns of formal schooling, (c) lack of certain basic cognitive skills--linguistic, problem solving, logico-mathematical, and (d) general discontinuity between school and community.[1] Early childhood education programs can also provide a source of child care so that older girls in the family, who would normally drop out to care for young children, can continue their schooling.

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[1] See also "A proposal for a program to reduce the drop out rate in Honduran Primary Schools". The Honduran Ministry of Public Education, 1975, p.4

Added together, the studies reviewed and arguments presented in this section do suggest a legitimate economic rationale for investment in early childhood education. The various rationale --increased equity and educational opportunity for poor children, greater efficiency of the formal educational system through less wastage, optimal development of human resources, increased productivity in the future for society--interlock to form a strong argument for investment.

Yet, one key question remains unexplored: how such investment, once committed to preschool education, can best be used. There is evidence, for example, suggesting that programs primarily or solely designed to increase or modify cognitive capabilities of young children are not likely to lead to substantial redistribution of occupational and other opportunity in later years (albeit for many non-educational reasons;see Bowles, Gintis and Simmons, 1975, Jencks, 1972). Should efforts perhaps be directed more to parents? Should they be tied in to other community development programs?

It is through the family and the immediate environment that the child acquires orientations toward work, sense of self, and achievement possibilities; these factors appear to account for a larger portion of the association between educational and economic attainment than cognitive ability per se (Bowles, Gintis, and Simmons 1975, p.21). Many current early childhood education programs do not involve families in any integral way. Thus, once the decision to invest in preschool education is made, a number of decisions with clear economic effects still remain.

Early childhood education programs can have very different objectives, use very different combinations of inputs, and be providing very different kinds of services. Economic analysis must be based on very explicit assumptions about comparability and effectiveness of programs. Even so, using economic criteria alone is never a sufficient basis for decision-making but can provide a systematic presentation of costs and outcomes as an element in overall policy formulation.

Costing out preschool programs

The decision whether or not to invest in preschool education, and if yes, what kind of investment to make, is analyzed at a pragmatic level through examination of costs and benefits. A number of kinds of cost-outcome analyses are possible, depending on the information needs of the planner, policy maker, or administrator. Policy makers may want to choose between alternative investments based on their efficacy in helping

achieve a set of economic goals, or on their rate of economic return to society. They may want to discover the least-cost strategy capable of producing certain effects. They may need information on which combination of inputs is most efficient at achieving a certain effect. They may want to know the costs of particular program components, and weigh these in terms of which are more and less important.

In order to carry out these various analyses, it is essential to develop information concerning the components of costs in early childhood education programs and, more difficult, the eventual results or benefits of such programs. In addition to standard components such as administrative overhead, physical plant costs, and personal services, there are often "hidden" costs such as volunteer time and donated materials. Few analysts of early childhood program costs currently use standard costing procedures, making comparative examinations of different programs misleading.

Four types of economic analyses can be applied to preschool investments just as to any other development program: cost-effectiveness, cost-efficiency (a variation of cost-effectiveness), benefit-cost, and cost-utility analysis.

In cost-effectiveness analysis, different program delivery methods with the same outcomes are compared, with the purpose of finding the least cost method of providing services resulting in the outcome to be measured. A single specific desired outcome is quantified (for example, achievement of minimum scores on an index of school-readiness tests) and the cost of various alternative methods of preparing a child to achieve that outcome are compared.

For example, Jones (1977) uses cost-effectiveness analysis in comparing three "variations" within the national early childhood program in Peru (called Initial Education). The three are (1) the Ministry of Education's regular kindergarten type preschool center program, (2) a community organized and supported program in the rural altiplano of Puno and (3) an experimental home-based model working with parents, developed by an American group (Project Portage) and funded by A.I.D. Jones suggests that the educational outcomes, which were to be measured in the home-based model through tests developed by the Peruvian Education Research Institute (INIDE), be measured in the other two models as well, and the results compared to unit costs of each program. The limitations of this type of analysis are that preschool program outcomes other than education (such as community development or improved nutritional status) are excluded from measurement, while the costs of these other outcomes, or at least part of the costs, are included in the comparison. "Integrated" early-childhood programs thus may appear to have higher costs per unit of educational outcome produced.

When outcomes are quantifiable in non-monetary units (such as test scores or other ability indicators), a cost-effectiveness test is used when we can hold the outcome constant, and a cost-efficiency test used when the outcome varies in amount but is measured in the same unit.

Both cost-effectiveness and cost-efficiency analysis are conducted to find the most efficient combination of inputs leading to a particular outcome that cannot be "monitored" or measured in dollars. Once a least cost program strategy has been selected, then a least cost internal management strategy can also be designed. Such program components as personnel combinations, duration of treatment and daily hours, materials, curriculum,and target population can be manipulated so that optimal use of all is ensured.

"Cost consciousness" has been, historically, very low among educators in general, and early childhood educators in particular. Furthermore, it is often not easy to modify or eliminate program elements found to be inefficient (especially if these elements involve professional personnel). Given the budgetary constraints facing many early childhood education programs, and the enormous numbers of children in need of services, it would seem logical that economic efficiency would be a central criterion for early childhood education in Latin America. This has simply not been the case to the present.

Cost-benefit analysis can be conducted when benefits can be converted to dollars or pesos, permiting calculation of the net value (benefit minus costs) to the individual, or to society of a particular investment. In preschool education, benefits have rarely been estimated in dollars, since the standard use of income as a proxy for benefits provides an outcome measure very far in the future and one that is influenced by many other factors. However, other benefits have been considered in a few studies. Freed time of the mother and reduced health costs due to improved nutrition are benefits calculated for an IDB-Chile case study (ODEPLAN, 1976). Reduced costs of special remedial education in formal school is used in addition to income differential as a benefit of the High/Scope Ypsilanti Perry Project, a U.S. Headstart variation (Weber,1978).

In Latin America, reduced repetition in early grades could provide an easily measured benefit if it can be attributed in some way to early childhood interventions.

One of the least explored, but potentially most valuable, cost analysis strategies for early childhood education is the cost-utility analysis, another variation of cost-effectiveness.

In such analysis various outputs--nutritional, health,educational, for parents, for children--are value weighted according to whatever criteria the evaluator chooses. Total output, in the form of some weighted index, is then divided by cost. Thus, two multiple intervention projects, for example, can be compared for their effectiveness as primarily educational programs with secondary nutritional components, or as nutritional and educational interventions. Using such analysis, two projects that have various combinations of objectives or emphases can be compared according to their cost-effectiveness in meeting priority young child and family needs.

The components of cost for early childhood, and general educational, programs can be collected using generally acceptable methods described in the numerous benefit-cost texbooks. Fixed costs, such as start-up or program preparation costs, are those that do not vary with the number of children or parents served, classrooms, teachers, or other elements, while variable costs, such as physical plant, teacher wages, materials, and training, vary with the number of recipients. Marginal cost is the additional cost per unit of expanding a program beyond a certain size.

The latter is particularly pertinent to early childhood education programs in Latin America, since most are relatively small in size and recent in inception. This potential for expansion suggests that many of the currently observed costs may decline over time as economies of scale are attained (more beneficiaries are divided into fixed costs). Nonetheless, although economies of scale can generally be seen to operate for overall program size, it is not so clear that they operate in terms of center size. Evidence from Chile,one of the countries analyzed in this survey, indicates that in some cases larger centers cost more per child.

In general, a list of cost elements for an early childhood education program might appear as follows. (Anywhere items are donated, an appropriate implicit or "opportunity" cost should be calculated):

I. Program Preparation

A. baseline surveys

B. curriculum design and preparation

C. preliminary administrative staff training or preparation specifically for the program.

II. Program Implementation (annualized)

A. administration and supervision (yearly operating costs of central office, wages of administrators)

B. program promotion (including transmission if any media costs are incurred)

C. training (of staff at all levels)

D. wages and benefits (yearly of all paid staff

E. physical plant (annualized construction costs or annual rent)

F. equipment and furnishings (annualized costs, or rent)

G. materials

H. specific non-educational inputs: goods and services (food, health treatment, supplementary social services)

I. time of parents or community members if involved.

Once total annualized program costs[1] are estimated they can be divided by the number of recipients to arrive at per unit costs. Also, per staff, per center and per subprogram unit costs can be calculated. Most important to note is that this costing procedure can be carried out at the program level, in which case a number of individual centers with varying costs per center are averaged, or at the center level. Both kinds of data are valuable for economic decision making. Going beyond "budget" items to include values for all inputs, donated, shared or purchased, will begin to build an information base for inter-country comparisons.

This latter distinction in costing out preschool programs is particularly important but often overlooked: the difference between budgetary expenditures and total actual program costs. The former represent only the money costs to the agency undertaking a program. The latter represent the total economic resources of a society expended in the particular program.

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1 Accounting procedures suggest the ways in which all the above costs are to be computed, for example, as capital or recurrent costs; also procedures exist for pro-rating the costs of shared services, and for estimating the value of donated goods and services.

Analyzing Benefits

While costing out preschool programs involves some judgment in terms of which components to include and how to value social costs, the costing process is very straighforward compared to analyzing benefits. Education in general, and preschool education in particular, is a complex social process yielding complex products, many of which are very difficult to quantify in economic terms. Yet, for purposes of allocation of scarce public resources "the economic rate of return is the only criterion which is comparable across all sectors of the economy" (Grawe, 1978, p.65). Thus, for purposes of informed decision making the calculation of benefits whenever and wherever possible is both useful and necessary (Grawe, 1978).

In general, benefits from education are said to accrue to individuals and to society. With respect to early childhood education, a number of the social benefits do not appear until many years in the future, and there is not only a judgmental element in their calculation but a projective, hypothetical element. Also, a number of benefits accrue both to individuals and to society.

Benefits to individuals in early childhood education programs are generally seen to accrue to the child participating, parents, and to siblings. The measure of benefits to each of the first two depends on the program focus. Those accruing to siblings appear in the form of spin-off from changes in parental knowledge, behavior, and/or attention or in changes of material status in the home.

Whenever programs focus on services to young children there is a long chain of impact to be measured. The child's immediate physical welfare (health and nutritional status) is generally improved, thus possibly reducing health care costs. The child's ability and incentive to absorb schooling is generally enhanced, thus improving efficiency and reducing wastage in the formal school system. Ultimately, as a result of better health and better education, the child's future earnings are increased.

One benefit usually attributed to parents from early childhood education programs is liberated time to work,particularly for the mother or older daughter. How this benefit is calculated depends on a number of factors: whether or not the job she acquires is at the expense of another person, her responsibilities to care for other children in the home, the type of job she might obtain, the fact that she already may have a job when her child enrolls in the program, and number of hours freed each day for work.

For both the child participating and the mother there are a number of less tangible benefits (psychic, attitudinal, behavioral, knowledge related), that affect personal and family satisfaction , the ability to take advantage of future opportunities, and other aspects of life. While it is clearly important to consider these benefits when examining the cost-benefit picture of a program, they generally cannot be quantified in monetary terms. Generally, benefits accruing to siblings are also difficult to quantify.

For home-based programs, working directly with parents, the combination of benefits accruing to mothers and children would obviously differ from center-based programs. Not only would "liberated time of the mother" not be a benefit, mother's time contribution would be seen as an opportunity cost. However, sibling spin-off may be more likely. Since nutritional and health services, and the educational program for the child might be more diffused if received through general home improvements, they could be more difficult to quantify for the child involved.

Calculating the differential earnings of the participating and non-participating child over the long run requires consideration of a number of economic factors, among them the "discount" rate, (since a dollar or peso received in the future is less desirable than one received today, future gains must be discounted by an appropriate rate factor), employment opportunities, earnings differentials in various professions, and changes in the structure of the economy. In the developing countries many of these factors are not stable in their pattern of change over time, and this fact makes calculation of earnings 10, 20, or 30 years in the future very hypothetical.

One benefit to individuals not usually considered in calculation of cost-benefit analysis of early childhood and primary educational programs is the re-distribution of government services and resources. While increased future earnings for children participating in early childhood education programs targeted at poor children may mean also a measure of income re-distribution in the future in favor of these children, the present re-distribution of society's resources to early childhood programs for poor children can be seen as contributing to improved equity. This is especially true when resources from general social sector activities not specifically targeted at poor families are diverted to early intervention or other poverty programs specifically designed for low income families.

A number of economic benefits to society are postulated to emerge from early childhood education programs targeted at low income children. One is increased productivity of participating children when they enter the labor force, due to their being healthier and better educated. (The intermediate steps here would be that participating children are better able and more motivated to take advantage of other educational opportunities.) A second is greater efficiency in the primary education system due to lower levels of repeating and dropping out for children participating in early childhood programs. A third is lower cost for remedial nutrition, health, educational and social welfare services for children participating when these would be supplied. A fourth is the previously mentioned immediate re-distribution of resources, and longer term re-distribution of income, resulting in a more equitable society.

All of these benefits remain largely hypothetical at this point in time in Latin America. There is no Latin American evidence that these benefits do in fact accrue to society from early childhood education programs targeted at poor children.

A broader approach to consideration of social benefits of early childhood education programs entails examination of social benefits as a whole and comparison of these benefits with those that might emerge from some other investment. The question of rate of return to society from an investment in preschool education rather than an investment in family planning or nutrition intervention, or maternal and child health, or even remedial programs at the primary education level, is quite important in scarce human and financial resource contexts where a number of serious social problems exist.

Analysts must currently employ considerable creativity in translating individual and social benefits of early childhood education programs into monetary terms. Some benefits--differential long term earnings for children, freed time of the mother for working, decreased educational wastage--can be translated into money terms without too much difficulty. Others, such as improved health and nutrition of a child, require estimates of the cost of diagnostic and remedial care if the child were to be ill or suffer from malnutrition, and assumptions about the probability that the child would receive such care.

Because the "market value" of a good or service that represents a program benefit is the most common yardstick for quantifying that benefit, two important qualifications must be noted. First, when the principal beneficiary is the individual, a cost-analyst must be very cautious in assuming a poor parent's willingness or ability to pay on behalf of a child for a particular

good or service. What is measured as a benefit (or cost avoided) must be relevant to the realities and capacities of the child, his or her family and the country's public sector.

Opportunities for improvement in analyzing costs and benefits of preschool education

A number of problems that make economic analysis of preschool education in Latin America a difficult task will be discussed in this section. The problems appear to be of three sorts: (1) those related to lack of accurate enrollment and cost data for current preschool efforts, and (2) methodological problems, pertaining to the difficulty of quantifying many benefits, to the lack of standardization in techniques used to conduct cost analysis, and to ambivalence of causal connections stemming from the complexity of education as a social process and product, and from the complexity and dynamic nature of the social system in which preschool programs operate.

The scarcity and unreliability of data on costs and enrollment of preschool education in Latin America has been one factor hindering serious efforts at cost analysis of preschool education. Because, until recently, preschool education was considered principally a consumption rather than an investment activity, little concern was shown for economic effectiveness and efficiency. As early childhood's role in human capital formation has become more widely recognized, so has the need for data to analyze early childhood programs in investment terms.

The three cost studies carried out as part of this survey are a first step in forming a badly needed data base to work from in analysis of early childhood programs. The experience of the investigators was that (1) even fairly straightforward cost data were very difficult to acquire; (2) many costs are hidden in monolithic ministerial budgets, and cannot easily be separated; (3) available enrollment data may not reflect true participation rates for young children and families; and (4) program administrators are not always anxious to reveal the costs of their programs.

The solution to poor data and inadequate methodology will require a greater commitment to analysis of early childhood education from economists and educators than has been in evidence in the past. Longitudinal studies tracing the actual interaction of short, medium, and long term benefits are needed, so that the current hypothetical models can be tested with empirical data.

Methods for weighing less tangible benefits along with quantifiable benefits must be developed, so that cost-benefit studies reflect a truer picture of early childhood education's economic viability.

The complexity of education as a social process and product, and the dynamics of the larger social system, contribute to the methodological problems discussed above. However, as empirical data begins to validate or reject current hypothesis, information on the benefits of early childhood programs can be more confidently and systematically presented. Economic viability is of course, only one of many criteria used in evaluating the worthiness of investment in preschool education, and efficiency is only one of society's many goals. Yet, thoughtful economic analysis can bring calculation of preschool education's benefits to the level of sophistication that other development projects in Latin America are achieving, and quite possibly interest many government planners in supporting early childhood programs that they once considered a luxury for the elites.

The existence of the problems discussed above indicate that much effort is needed, at a number of levels, to refine economic analysis of preschool education to the point at which it will serve as a reliable tool for decision makers. More specific suggestions will be discussed in the final section.

Discussion of the three country reports

This section will present the results of the three economic analysis conducted for the present study. These analysis were conducted in Bolivia, Chile and Colombia, and are available in their complete form in the country reports.

The three surveys are based almost entirely on macro data, as collected by public agencies. Even at this macro level, there are problems in using the data. On the enrollment side, it is not always clear exactly what constitutes "preschool" education. For example, it is difficult to believe that the figures on percentage of population (aged 4-6 years) enrolled in Colombia (5%) and Bolivia (27%) are conceptually comparable. And on the cost side, each of the surveys faces insuperable problems in the attempt to convert budgetary data into social cost estimates.

As a result, no more than crude indicators of preschool costs could be expected to emerge. The estimates of cost per student per annum that appear in the surveys are, translated (at official exchange rates) into 1977 U.S. dollars, $18.42 for Colombia, $182.92 to $.53.81 for Chile and $92.56 to $141.63 for Bolivia. The fact that the services provided in

preschool programs are not the same within and between these countries may account for some of these huge differences.

Another problem with macro data is that it hides, through aggregation the very information that is ultimately really interesting from a policy viewpoint. Each of the surveys makes efforts to indicate the difference in costs per student according to the kind of preschool program--according, for example, to size of school, degree of public sponsorship or extent of services offered--but the macro nature of the data currently collected greatly undermines the efforts.

The surveys have not attempted an exhaustive listing --not to mention quantification--of the benefits that could be expected to ensue from preschool programs. But all discuss at length what they apparently feel is potentially the most important element of these benefits: the reduction of primary school drop out and repitition rates. Since both these problems appear most significantly in the earliest primary school grades our hypothesis is that preschool programs can be part of the solution to formal education system wastage.

More detailed summaries of the three surveys follow:

Bolivia

There were 74 thousand children enrolled in preschools in 1974,[1] more than one fourth of the total population aged 4-6 years, 271 thousand. With the exception of the sharp drop in 1975, the enrollments have kept close pace with the population (aged 4-6 years) growth rate of 2.2% over 1967-76. The enrollment rates reported for Bolivia are dramatically higher than those for Colombia and Chile.

Roughly 77% of matriculated preschool children attended public preschools in 1976. This percentage has grown steadily since 1967 (at a rate of 2.8% per annum), due to the slow growth of the private sector. which was hampered by teacher shortages and public policy. The growth of public preschools was due to an increase in numbers of establishments with the enrollment per preschool remaining around 100. Student-teacher ratios were 23:1 for public preschools in 1976.

Estimates of costs per student have been made for Bolivia, but the divergences in capital costs for public and private preschools are difficult to understand--such costs were estimated

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1 The figure had dropped to 45 thousand by 1976 due to the suspension of rural preschools in 1975.

to be more than four times higher for private than for public preschools. The resulting estimates of annual cost per student in 1975 were $b2,514 (or about US$126) for private preschools and &b1,643 (US$82) for public schools.

There is little evidence available on which to estimate quantitatively the benefits of preschools except, again, of high drop out and repeat rates in the early years of primary school. Only 67% of those who start first grade in Bolivia progress directly to second grade, with 28% dropping out and 5% repeating.

Chile

Enrollment in preschool education (under the Ministry of Education) was 110 thousand in 1977; this was 4.9% of the number enrolled at the primary level, 2,242 thousand. Of the preschool children, 74% were in public institutions, a fraction only slightly smaller than the 82% of primary school students receiving public education. For Chile, data are also available on teachers by type of education. The student-teacher ratio was 36:1 in public preschools and 32:1 in private preschools (compared to 32:1 for all primary schools).

The public preschools of Chile are operated under two different Ministries, and estimates of cost per student were made for each. In each case, the estimating procedure began with the actual budgetary expenditures per student and then made adjustments (upward) to allow for certain non-budgetary but clearly social costs. The resulting estimates for 1977 were 9,770 pesos (US$450) for the preschools under the Ministry of the Interior) and 3,938 pesos (US$181)(for the preschools under the Ministry of Education).[1] The great difference between these two estimates is due almost entirely to the fact that the preschools under the Ministry of the Interior provide extensive non-educational attention (particularly with respect to health and nutrition) to their students. There is also some indication that the size of the preschool matters. For the Ministry of the Interior data, the cost per student was 9,320 pesos (US$429) for preschools of 96 children and 9,969 pesos (US$459) for preschools of 216 children, suggesting--surprisingly but probably not significantly--scale diseconomies that bear further investigation.

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[1] The Chilean peso was worth about US$0.046 during 1977.

Colombia

In 1975, there were 97 thousand children enrolled in preschool education, out of a total population aged 4-6 years of 1,833 thousand. And of those in preschool programs, 69% were in private institutions and 68% lived in the four major cities of Colombia. Many different programs and institutions are involved, and it is therefore impossible to describe with any generality the orientation, activities or coverage of "the" Colombian preschool program.

In the public educational sector in 1975, preschool children comprised 0.7% of the total school enrollment and received 0.2% of the public education budget. Accordingly, the annual average cost per student was quite low 510 pesos (US$16) for preschool, compared to 1,054 pesos (US$34) for the primary level.[1] The preschool budget allocation has, however, been growing rapidly in recent years; since 1970, the absolute peso figure has increased at 76.8% per annum, and the preschool fraction of the total public education budget has increased at 35.0% per annum.

There are few data on (or estimates of) the benefits produced by Colombia's modest preschool programs. But one fact does stand out. Currently, only 54% of those who enter first grade move directly on to second grade; of the rest, 24% drop out and 22% repeat first grade. (For all primary school grades, repeaters make up about 15% of the public enrollments). Since primary schooling is roughly twice as expensive as preschool, there is a prima facie case that, if preschooling could reduce the propensity to repeat at the primary level, it could be highly cost-effective.

Next Steps

In the short run, four types of efforts are needed to contribute to a baseline of data for more analytic studies. One is micro-studies examining the cost structure of particular preschool programs, (or delivery methods). The second is improving reliability of enrollment and cost data from program studies. When even average costs are not reliable, trying to make decisions for particular settings is impossible.

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1 The Colombian peso was worth about US$0.032 during 1975.

Corollary to the first type of effort above would be studies analyzing the costs of particular outputs in a preschool program, at the center and at the program levels. That is (1) which components of cost pertain to which kinds of output, and (2) what percentage of total cost can be attributed to particular outputs.

Also needed would be studies analyzing the structure of costs for different programs: formal, center-based, using professional teachers, using paraprofessional teachers; home based, working with parents; community supported programs; separate centers versus those tied to primary schools. Capital and labor, skilled and unskilled labor, and related factors within programs are to some extent interchangeable. Least cost input combinations must be sought out, and their potential to maintain effectiveness must be examined.

In the longer run, studies are needed that provide a projective focus. These studies would examine longitudinal effects of preschool programs, replicability of models from an economic point of view: the prospect for intersectorally funded early intervention activities; and broad questions pertaining to efficiency of investment in early childhood education as one of many investment options. A second area for economic analysis in future studies might be the economic effects of early childhood education on the family.

The economic analysis of early childhood education programs should become an integral part of all formative and summative evaluation activity. At present, only a narrow range of performance data--quite often limited to individual I. Q. and achievement data--are collected and used for planning and quality control. Collection of economic data should become an integral part of broader efforts analyzing the social impact of early childhood programs on the communities they serve and at the national level.

In a world in which UNICEF's total annual budget to serve 102 countries, $207.5 million, is spent by all countries on armaments in approximately five hours (New York Times, June 7, 1978 Letters to the Editor), it should not be that difficult to justify some increase in investment of "scarce" resources to meeting young children's needs. But many policy makers and planners remain skeptical, and the examination of early intervention's economic viability will probably prove to be a key way to call the attention of national and international decision makers to programs for young children.

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VI. Ten Policy Questions

In this chapter issues that have been identified as central to the planning and implementation of preschool programs in Latin America will be discussed. The issues will be presented in the form of questions. They were selected on the basis of (1) importance given to them by interviewees in Bolivia, Chile and Colombia in their discussions with project investigators, (2) importance given to them in background documents analyzed for the literature review, and (3) the experiences of the project investigators themselves with preschool education in Latin America.

Key Question Nº 1

Who should preschool programs be serving; how can they best be reached?

The data from the countries studied in this report and a number of other countries indicate that preschool programs are currently reaching between 5 and 10 percent of Latin America's young child population. As was also mentioned, this young child population is growing rapidly--it will almost double by the year 2,000. And it is growing most rapidly among Latin America's poor.

Within the context of this rapidly growing young child population a number of strategic questions present themselves. Do countries want to set for themselves a goal of complete preschool coverage in the near or distant future? If so, given human and financial resource constraints, are there any strategies of intervention that make this difficult goal possible? If not, to whom should investment in early intervention be directed? On what basis should criteria for most-in-need be set?

There appears to be a need to seek out strategies that not only enable countries to reach more children living in poverty, but to reach those poverty children most in need. Perhaps 80 percent of children in Latin America are born to poor families. What criteria for selecting poverty children to be targeted for service should be used? Income level of family? Number of brothers and sisters? Employment of mother?

Condition of housing? Nutritional status? All these potential criteria are valid and do not always correlate highly. Using different criteria could lead to selection of different populations for attention.

The tendency among the broader, national efforts has been for them to reach a population of children which, though poor, are not those most in need by nutritional, health, and psycho-social criteria. These programs appear to be reaching those poverty children easiest to reach, not those most in need. The reason may be that it is easier to implement intervention programs in communities or regions where there already exists some social sector and educational infrastructure. The populations of these communities are generally already benefitting from various social development programs.

Finally, the issue of coverage is closely related to resource availability, including financial support, administrative systems and infrastructure, replicable program models (showing some evidence of effectiveness), and capable, appropriately trained people to staff the system. In this report we have seen that there are severe limitations in each of these areas.

We conclude that there is currently little chance that the majority of the needy children of Latin America will be reached through existing preschool education service mechanisms within the forseeable future. Further, we are of the opinion that the available data base on program effectiveness, and cost-effectiveness, is not strong enough to support an argument that the existing preschool service models deserve the increased investment that full coverage would require. We would suggest that public preschool education policy in the developing countries, in recognition of this situation, should not pretend to attempt "full coverage" as a short or even medium term goal.

On the issue of coverage, we would recommend that

- *Existing early childhood education service programs be more carefully targeted to the neediest of the poor population. This should include a clear definition of the extent and*

location of this priority population - as has been done in Chile. Not only is this suggested from a humanitarian point of view, but the simple fact is that early childhood education research has repeatedly demonstrated that the more disadvantaged the treatment group, the more powerful the effects of the treatment. Or in other words, the neediest benefit the most.

- *Existing preschool education programs be modified to incorporate increased self-help components, thereby stretching the institutional dollar invested and facilitating moderate expansion. This might start with a careful analysis of program costs and an inventory of how these could be supplanted or supplemented by local in-kind donations or contributions.*

- *New monies be made available to support carefully designed action research programs that test innovative and potentially lower cost early childhood education programs, or program components, that might further increase coverage within resource constraints.*

- *Finally, international agencies should examine the current range of their activities to see how early childhood education might fit into broader social development plans. The emphasis should be on integrating early childhood education with other programs, not creating new ones. Existing food distribution, health and non-formal education projects might be especially appropriate places to look for these opportunities.*

Key Question No 2

Who should have administrative control of preschool education programs?

At the national level there appear to be two broad courses a country can take with respect to developing national early childhood education networks. One is to plan and

implement one national program from the center--that is, through a Ministry or agency headquarters. Such a program would be centralized not only in administration, but in content and strategy employed. The other course is to develop an administrative system that permits and encourages diversity in strategies employed in different regions and different communities within those regions. Each broad approach has implications in terms of target population reached, types and extent of effects, costs, ability to adapt to local conditions, and the role early childhood programs will play in general community development efforts.

It was generally agreed by survey participants that a significant expansion of preschool education as part of the national formal education system, the development of preschool education in a manner similar to that in which primary education has developed in recent years in Latin America --linear expansion of an already existing infrastructure, slight modification of curriculum, but no basic structural modifications--is not feasible. The potential still exists to learn from the problems brought about from rapid linear expansion of a primary system recognized as wasteful, often inflexible, and possibly dysfunctional for millions of poor children. It is generally agreed, also, that active involvement of and work with parents must be a central component of any early childhood program; the formal system in Latin America has generally been isolated from parents and community.

In other words, even aside from the resource constraints preventing significant expansion of a new level of the formal education system in Latin America, there are a number of strategic reasons that this might not be the best approach. A number of options nonetheless remain. One is development of one national preschool program under the auspices of an agency other than the Ministry of Education. A second is to develop an administrative structure under one or a number of agencies that supports the development of diverse programs and strategies in various parts of the country. Both approaches offer advantages and disadvantages.

A large centralized program--such as is being developed in Chile under the JNJI--has the advantage of visibility and widespread recognition of its responsibilities and mandate. This makes it easier to secure financial support. It offers centralized administration and planning-enabling it to target

resources to a selected population. It facilitates control of quality through setting of norms and standards for the classroom.[1] Such a program, under an official agency, can compete politically for government support. And it offers potential for better coordination with other agencies, ministries, and programs.

One potential disadvantage of a national preschool program outside the Ministry of Education is that the educational component may become minimized, in order to concentrate on the nutritional, health and social welfare components (this has happened, to some extent, in Colombia with the CAIP program). Another potential disadvantage is inflexibility--inability to adapt strategy, content, human and financial resource requirements to specific conditions in various local settings. Inflexibility translates into less efficient and effective use of local resources; it is generally more of a problem in countries with wide variations in regional and local resources, socio-economic conditions, cultural patterns, geography and social problems.

Inflexibility of centralized programs is part of a larger pattern that can be described as "bureaucratization". When institutions reach a certain size they tend to function more to assure their own perpetuation and survival, than to serve a particular population or attack a particular problem. Also when the chain of command for implementation of decisions involves a number of administrators and supervisors, there is both a delay and the possibility of disruption with regard to implementation. It is not clear if these tendencies have begun to set in the few large programs ongoing in Latin America; but, as has been mentioned, those responsible for developing national preschool education systems in Latin America are still at the point where they can learn from the mistakes of previous social development efforts.

The third option that exists for development of early childhood education in Latin America is very different from the two centralized options just described. This option is based on development of a national system of somewhat autonomous programs and strategies, implemented in specific regions and communities to meet local needs and to take advantage of local resource

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[1] This is only true to the extent that quality control has some impact at the local level.

contexts. The "system" would possibly be under the political (in the broad sense of the word) and administrative direction of a national agency created to coordinate efforts in behalf of the young child (such as ICBF in Colombia).

The emphasis on diversity, planned or deliberate variation, would permit context--specific program planning, and perhaps more accurate targeting of services to those children and communities most in need. It would potentially enable community members to take a more active role in program planning and implementation. National centralized programs tend to emphasize the distinction between professional and nonprofessional through the creation of an extensive administrative support network made up of technicians. Theoretically, middle level technicians, often closer physically to communities receiving services than higher officials, are an ideal source of technical assistance to community members involved in making child care decisions.

Under a diversified national system, divergent early childhood education strategies could develop in similar settings providing policy makers and planners with data on which to base future decisions for investment. This potential research benefit cannot be overlooked given the lack of data in most Latin American countries about what works and doesn't work in various settings.

The need for flexibility among programs in developing a national early childhood education system is also present within programs. To the present, limited evidence suggests that locally developed efforts, mostly pilot programs, tend to have more internal flexibility than centralized programs. The ability to use continuous feedback to modify various components of a program is particularly important with respect to preschool education at this point in time in Latin America. A local program, not tied by norms, standards and regulations to a centralized ministry or agency, can modify itself much more easily than a program that is part of a centralized effort.

The difficulties in implementing and supporting a diversified national system would be numerous. First, if there were a national coordinating agency, the question of control of decisions would arise. If this agency controlled disbursal of funds to support local efforts, the question of control would be particularly sensitive. The question of "lifetime" of programs becomes pertinent when many local programs are developing. Some of these efforts would start as pilot efforts, and would die out after a few years. Some mechanism for assuring program continuity--particularly financial support--would be crucial.

Many community level programs would develop as efforts of particular local community development agencies or programs, and the question of relationship to and coordination with other related efforts in that community would be pertinent. As with centralized programs run by other agencies or ministries than the Ministry of Education, the danger of the educational component being minimized is present in programs run by non-educational community development agencies.

We conclude that both centralized and decentralized national early childhood education systems offer problems and prospects. Within the key issue "diversification of services" is a key concept--flexibility. The constraints within which preschool education must inevitably develop in Latin America, and the great diversity in socio-economic, cultural, institutional, and geographic contexts within countries, suggest that a minimum necessary element for any national preschool effort is enough built-in flexibility to assure ability to respond to constraints and context.

> *We recommend that even in those cases where centralized program structures are seen as a functional or political necessity, the process of development emphasize diversity and flexibility over attempts to implant rigid uniformity or definition of program content and delivery system procedures. It is obvious that no one has been able to demonstrate that they have found the one early childhood system applicable to the diverse opportunities and constraints in any country. In this situation, we would encourage decision makers to make every effort to promote diversity of carefully planned and monitored activities, rather than allow any one system to establish itself which would have little more than an administrative decision for support.*

Key Question № 3

How can the full range of the child's basic needs be met?

The growing interest in meeting developmental needs of young children in Latin America through intervention has led to increased examination--both impressionistic and more

scientific--of the actual situation of the young child. This examination has revealed that the problems of young children form a complex of interacting variables that must all be attacked for there to be a significant effect on any one of them. Physical problems--malnutrition, disease, and infection--affect cognitive performance and social behavior. These physical problems themselves have both medical and nonmedical causes.

This awareness of the multiple and interacting nature of young children's problems has led to a concept that is currently the basis of most action on behalf of young children throughout Latin America. This is the concept of "atención integral," or integral attention. There is no one conceptual or operational definition across countries for this term. And even within countries the operational implications of integral action have not been worked out.

Problems in defining this concept appear in goal setting (whether to define a program as primarily nutritional or educational intervention, for example,) in balancing and coordination of components, and in staffing. The concept of integral attention is very broad, and can cover the range of interventions from custodial care with a few cursory nutritional and educational elements to sophisticated and expensive experimental programs. The danger is in using it to escape responsibility for defining clearly the focus and scope of a program.

Currently in Latin America, early intervention programs are shaped very much by the training and orientation of those running them. Psychologists, educators, nutritionists and health officials tend, with notable exceptions, to orient their programs in the direction of their specialty. The two major influences appear to be the psychologists and nutritionists.

For example, educators insist that the central component of any early intervention program must be carefully planned educational activities. Non-educators, for example nutritionists, when working out the daily educational component of a program, might not think in terms of a particular pedagogical framework, a carefully planned curriculum, structured activity centers, but rather in terms of an hour or two a day of more less random activity. Unfortunately, nutrition programs with poorly planned educational components, and vice-versa, is the rule.

The administrative structure of organizations working with young children also contributes to lack of coordination of services and/or monofocal intervention projects. To cite a case, international agency nutrition office staff are sensitive to the fact that their mandate is improved nutrition, and are most cautious about supporting program components not clearly and directly in the mainstream of their program responsibility. Education officers are not filling the gap, so far they have focused their concern on the problems of the traditional educational system, or non-formal adult education.

One way in which the barriers can be broken down is by working with those responsible for all the young child's needs--nutritional, health, cognitive, social--that is, with parents. The parent is naturally involved in all these areas, and is the most natural agent, generally, for meeting the young child's needs. Although most programs working with parents to the present have been educational--working with parents on children's physical and psycho-social needs--the effects of such programs have been integrated action by the parent to better meet young children's needs.

We conclude that the concept of integral attention at the very least conveys the necessity of developing early childhood programs that focus on more than just one variable within the complex spectrum of problems facing Latin America's poor children. Limited evidence available--for example, from the longitudinal projects of the Human Ecology Research Station and ICBF in Colombia--suggests that when nutritional and educational components are combined, they not only reinforce but magnify each other's effects.

We recommend that those charged with developing and implementing programs reaching young children, both in developing countries and international agencies, establish ad-hoc multi-disciplinary working groups to examine from the perspective of "basic needs", existing and proposed intervention and research efforts reaching the young child and his family. This would first imply a detailed listing of objectives and desirable program components. It would also imply pursuing the issue at the level of program implementation. Because it seems to be an area of singular lack of expertise, international agencies should recruit early childhood development consultants to work with their staff on some of the issues, purposes, and potential

strategies in the explicit early childhood educational components.

Key Question № 4

What should be the nature and extent of intersectoral cooperation in early childhood education?

The idea of integral attention as a basis for program development has its counterpart at the macro-level in the concept of intersectoral cooperation. This concept implies the cooperation and coordination of the various Ministries and agencies responsible for meeting the young child's needs, in the planning and implementation of intervention activities.

Quite often, the basis for intersectoral cooperation is found in laws, decrees, or "convenios"--agreements drawn up between particular ministries outlining the broad forms cooperation might take. Sometimes cooperation is more informal, two agencies might work together to develop a specific program. In this latter case, the program is usually the idea of officials in one agency, who invite other agencies to assist in various program aspects. Only rarely are there likely to be found truly joint programs, conceived, planned and implemented by an intersectoral team from the start.

The rationale for intersectoral cooperation lies in the multiple and interacting problems affecting young children growing up in poverty in Latin America, and the need for multiple interventions; in the need to avcid duplication of services, often a problem when various sectors act on their own, and especially serious within a scarce resource context; and in the need to develop a consistent, uniform young child policy, so particular agencies and ministries are not acting at cross-purposes with each other (e.g. aiming at different target populations).

Problems in the actual functioning of intersectoral cooperation have been numerous. In a broad sense, there has been moderate success in cooperation at the planning level in a number of countries. But cooperation has often broken down at the operational level. Institutional and individual resistance to intersectoral cooperation has manifested itself in a number

While we see intersectoral cooperation as a key to the future of early childhood education we have not formulated any specific recommendation on the issue. The opportunities and constraints are so varied that observations or recommendations that we as a group have been able to come up with are either too general or too obvious to be useful.

Key Question Nº 5

How should the role of parents be defined?

While it has become increasingly clear to early childhood program planners that involvement of parents in preschool education programs ought to be a central concern, the kinds and levels of involvement envisioned by those planning and implementing programs vary considerably. The reasons given for the importance of parent involvement also vary. Nonetheless, all agree that parent involvement should be a key element in any future early childhood education programs.

Among the most important bases for involvement of parents in early childhood education programs are (1) the parents' broad role as primary caretakers and most important influence on the course of the young child's development; (2) the potential spin off effects on the quality of family life effective parent involvement can bring; (3) the impossibility of directly reaching the large majority of young children in need of intervention; (4) the specific roles of teacher, nutritionist, and health caretaker played by the parent and (5) the traditionally strong role of the family in Latin America.

Among the roles parents play in early childhood programs are policy maker, teacher, program organizer, non-instructional aide, and learner. To the present most parent involvement in early childhood education programs in Latin America has been superficial. Parents may contribute money, join weekly discussion groups, occasionally work as aides. The exception to this trend has been in the programs aiming their services directly at parents (mostly pilot programs), a few parent and child programs,[1]

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[1] Among these two groups of programs are Chile's "Programa Padres e Hijos," Bolivia's "Programa Padres e Hijos", Colombia's "Programa Niños Inteligentes", and Project Portage's Home Based Intervention program in Perú.

and a few home care programs.[1] The tendency has been for the large, national programs to have much less parent involvement than the pilot programs and community generated efforts.

In almost all programs the parent has been a learner. The parent-as-teacher concept applies mostly to the home based programs, but even here the program structure and content stresses parents learning how to be better teachers of their children. The role of parents as program organizers and policy makers and partners in the development of curricula for their children has been very limited.[2]

Within the large, national programs there have been a number of factors constraining more active parent participation. One has been a lack of knowledge on the part of classroom teachers about how to effectively involve parents in their programs. Some teachers apparently lack the confidence and skills to work with adults. In many instances, teachers prefer that the school and classroom remain off-limits to parents. While objectives and time for working with children are clearly laid out, objectives and time for working with parents are often described in only the most general fashion.

The inability of "formal" preschool programs to involve parents effectively has led to a view among many parents and community leaders in Latin America that preschool education acts in opposition to the family. Involvement of parents in decision-making and other integral program activities would help break down the school-community barriers that often exist not only at the preschool level but throughout all levels of the formal education system.

Some of the constraints to parent involvement pertain to social and economic factors in the lives of the parents themselves, and may not be amenable to alteration through change in program strategies. Many parents (fathers and mothers) must work long hours to earn a living, or work far from where their children are attending school. Many parents, generally mothers, have other young children to attend to in the home. Some parents do not view themselves as deliberate educators of their young children, and view the school system as responsible for their children's education (although not for their children's socialization, in some cases). In many rural areas, traditional patterns of child care are viewed as adequate.

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1 For example, the "Hogares de Cuidado Diario" in Venezuela

2 The article "Parents and Educators: Experts and Equals" by Dolores Z. Lambie in the High/Scope 1975-76 Report describes one approach which might be taken to bringing parents into the policy and curriculum development process, as well as being the agents for service delivery.

Another constraint may be parents' and teachers' views of the central purpose of preschool education. These views often revolve around preparation of the child for first grade. Both may see this as more effectively accomplished through formal, center based programs with professional teachers working directly with the children. This expectation may help explain why programs working directly with parents--parent education programs-- tend to focus on stimulation and care for children 0-3 years of age.

We conclude that parents are a greatly under-acknowledged and under-used resource in early childhood education in Latin America. Because the environment of the home has a much greater influence on the young child's development than all but the most powerful intervention, parents' roles as teachers and caretakers of their young children cannot be ignored in early childhood program development. For both ethical and practical reasons, possible variance in parental and program goals, values and behavior must be dealt with at every point in program planning and implementation.

Involvement of parents in more than marginal program activities would also help to solve the human and financial resource constraint problems faced by most early childhood program planners in Latin America. In programs aimed at children, parents can play a number of instructional and noninstructional roles. When they are involved in playing these roles, this involvement often changes their lives and the lives of their families (for example, with respect to aspirations for themselves and their family). The problem of reaching enormous numbers of young children can be partially resolved by working directly with parents, as they often have 2, 3 or 4 young children in the home (a "class" of 20 parents may directly influence 80 or 100 children).

We recommend that program developers be especially sensitive to the issue of parent involvement in, and even control of programs serving the preschool age child in Latin America. The question of how to involve parents most effectively is being actively worked out by a number of promising pilot efforts throughout Latin America. The problem will be in either expanding these efforts, or incorporating their findings into the large institutional programs The history of formal education -- including kindergarten education--in Latin America provides little basis for active parent involvement. Nevertheless, the potential impact of preschool education in the coming years will be closely tied to success in this very area.

Key Question Nº 6

Who should be the "Educational Agents" in preschool programs?

Educational agents are those that have a potential role to play in promoting, organizing, teaching, assisting, facilitating, extending and supervising learning in young children.[1] They are, in other terms, the available human resources for a particular educational activity. Their effective and efficient use must be a central concern to early childhood educators for economic, pedagogical, socio-cultural, and a wide variety of other reasons. Yet the major programs, the large national programs that have existed to the present, have demonstrated only the most limited ability to make effective use of educational agents.

The clearest example of inability to make full use of educational agents at the preschool level is the failure to actively involve parents, discussed in the previous section. With respect to other informal agents, from whom the young child acquires many of his or her behavior patterns, values and knowledge, most are not considered when examining the learning context of the young child. These may include older siblings, relatives, non-relative caretakers, and community members involved in various trades, to whom the child is exposed.

Perhaps the most common non-professional agent involved in preschool education is the paraprofessional (also called auxiliary, teaching aide, monitor, etc.) responsible for playing a teaching role in many programs. For economic and strategic reasons, the paraprofessional teacher is coming to be viewed as the central educational agent in a number of ongoing programs. Even in the large, national programs teaching roles for paraprofessional are increasing.

Yet in most Latin American countries, training and preparation of educational agents at the preschool level is oriented strictly toward training of professional classrooom teachers. There exist very few programs for regular training of paraprofessionals; and there is little inclination among

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1 For a more comprehensive definition see "Los Agentes Educativos en la Educación No-Formal", Centro para el Desarrollo de la Educación No-Formal, Bogotá, Colombia, 1976.

education faculties in many universities to assume such a role. Even the training of formal educators does not prepare them to train or work with paraprofessionals; or to make effective use of the variety of educational agents in the communities in which they will teach.

In the planning and implementation of preschool programs in the coming years the question of most effective combinations of staffing, vis-a-vis degree of professional training, is one that will have to be considered seriously. The optimum ratio of professionals to paraprofessionals, the roles each might play in the classroom and in the community, the kinds of support each gives the other, must all be considered in relation to goals, resource constraints, community socio-economic needs and cultural norms, and number of children in need of services.

We would recommend that in early childhood education the trend move away from using highly trained professionals for providing services directly to children, to using these professionals as trainers (hopefully in in-service settings) of paraprofessional staff who become the front-line educational agents. In formulating this recommendation we recognize that in reliance on paraprofessionals there may initially be a trade off between the formal education content of a program for young children and other objectives. But in a broader sense, the training of the paraprofessional him or herself leads to a better educated and able community.

The consideration and recognition of educational agents in the planning and implementation of preschool programs would serve to increase the professional educators' sensitivity to the large number of sources that influence the young child's development. Too little consideration has been given traditionally to the values and strengths of the community in planning preschool programs and almost no recognition to the fact that the parent is the primary educator of the child. Many community members--parents and others--have not been consciously aware themselves of their potential as educational agents. Implementation of this recommendation could do much to change this, and if this were effectively done the impact might be felt far beyond the walls of the preschool classroom and the early years of the educational process.

Key Question № 7

What is the importance
and what are the most effective modes of
community participation?

The issues of parent participation and roles for educational agents form part of a broader issue that must be considered in the planning and implementation of preschool programs. This issue is support and participation of the community at large. The need to consider participation of parents and other non-professional educational agents will not be discussed further in this section. The emphasis will be rather on discussing the need to consider and consciously plan strategies of support for particular programs and preschool education in general.

There are probably three elements to be considered when planning strategies of support. The first is promotion--making the community aware of the importance of preschool education in general, and the purpose of any particular program (answering the question: What is the program doing in our community, with our children?). The second is mobilization of community resources--through more effective use of educational agents, through the tapping of technical expertise and coordination of intersectoral activity, through raising of funds and materials, and through generally identifying roles that various institutions and individuals might play in supporting preschool activities. The third element is more conceptual than operational. That is, examination of the socio-cultural context in which the program is developing, and planning in terms of that context. This process is considered an element of strategies of support because when it is not taken into account the community is not likely to mobilize its resources on behalf of a program.

The promotional task is important not only to assure general community understanding of the purpose of a program and the importance of preschool education, but to assure the understanding of professionals from other sectors and educators from other levels of the educational system. Resistence to preschool education sometimes comes from the most prestigious members of a community.

The question of how to promote preschool education depends on the nature of a community. In small towns, semi-rural and

rural areas there are usually social meeting points for the whole community (e.g. the church). In larger communities there are barrio councils and other bodies. There are school parent associations. The use of media--radio, television, the press, posters-- also depends on the nature of a community.

The task of mobilizing community resources also depends on the nature of a community, and the institutional base of a particular program. Mobilizing community resources to support the large national programs can be viewed more in the context of finding roles for various educational agents from the community than in a financial context. In locally generated programs, financial support may be a central issue.

It is important to recognize that different community members can usually make, most comfortably, different kinds of contributions. Also non-educators with some prestige in a community are often enthusiastic and very effective resource mobilizers, and should be included early in a program's development. It is important to note that the mobilization of community resources is a legitimate and important process in poverty communities as well as those with more resources. The poor have just as much interest in and commitment to their children as those less poor.

With respect to planning strategies of support from a community for preschool education, those responsible for preschool education must have both a positive attitude towards and operational strategies for supporting community initiatives. This support appears to be most difficult to give in the context of the large national programs. Centralization is not generally congruent with local community initiative. But those working in preschool programs at all levels ought to be prepared to act on communities' ideas, and more importantly, provide technical backstopping once a program has been implemented.

The third, more conceptual element of strategies of support <u>from</u> and <u>for</u> communities with respect to preschool education will be discussed as a separate section later. Nonetheless, it is this element, the socio-cultural context, that infuses the others. This element in fact forms part of the framework of all decision making with respect to program development.

As with a number of other key issues, the issue of community support and participation is rooted pragmatically in the scarcity of official human and financial resources available to support development of preschool education. This scarcity is not likely to change dramatically in most Latin American countries in the near future. Nonetheless, even where resources are available,

the implementation of programs for young children in communities, without first seeking the support and participation of those communities, would inevitably inhibit program success. Again, with this issue we have no specific recommendation to make other than one which might encourage more sensitivity to the issue among program planners and implementators.

Key Question № 8

What might be the relation of preschool education to other levels of the educational system?

As preschool education becomes more widespread, the question of its role within the total educational system becomes pertinent. For example, the question of "fit" with the primary system versus importance in and of itself must be resolved. Also, possible programmatic connections between preschool education and other programs can be considered.

In spite of goals speaking to optimum development of the child across a variety of areas, in actuality many preschool programs focus on preparing the young child for first grade. In fact, it appears that there is pressure on preschool teachers to do so. This day-to-day focus on basic skills and behaviors necessary for first grade is most obvious in the year before primary school begins. A large percentage of poverty children who begin primary school in Latin America, including those few who attend preschool programs, will not complete more than a few years.[1] Thus, another important question becomes: should preschool programs concentrate on preparing young poverty children for school, if they are not going to be in school long? If not, what kinds of program emphasis and child abilities and behaviors should be stressed?

Another aspect of the relationship of preschool to other levels of education pertains to investment decisions with respect to human and

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1 As of the present, there is no evidence from Latin America indicating that attendance in preschool programs significantly decreases primary wastage.

financial resources. What would be the effect of redistributing funds and personnel from other levels to the preschool level? Are there community contexts in which preschool education will be viewed as the basic education that children will receive, perhaps in place of primary, and thus would be deserving of greater resources for that reason?[1] Would greater investment at the preschool level contribute to decreases in primary level wastage?

If preschool education is to be implemented within the context of integral attention--dealing with more than strictly educational needs of young children--then it would seem that preschool-primary fit need not be that close. At the same time, programs with strong nutritional and health components might help eliminate medical reasons for repeating and dropping out among primary children. It is only at the preschool level, nonetheless, that the concept of integral attention is a basis for planning educational programs.

Another way that a policy maker might view the preschool/primary school relationship is through the perspective of the educational innovation process. There is limited evidence that innovative educational practices can be introduced more easily into preschool programs than formal educational systems. Being a relatively new field of endeavor, the protective bureaucratic structures are not as deeply entrenched, and there is at least impressionistic evidence that preschool teachers are more sensitive to the child development process than their elementary school counterparts. These factors may facilitate successful preschool innovation. Similar to the experience of "Follow-Through" in the United States, the existence of a "demonstration" setting, combined with a carefully concerted effort to extend these into the elementary system may enjoy more success than more direct attempts to modernize the formal educational structure.

The question of possible relations or coordination between preschool and levels of the educational system other than the primary level is rarely considered. One area of natural coordination might be with adult basic education. Adults are generally highly motivated to learn when the content pertains to some knowledge and information pertinent to their concrete

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[1] For example, the "Escuelas de Banco" of Cartagena, Colombia, formally conceived of as a preschool program, have many children 6-13, with no schools available to serve them, in attendance. In rural areas children sometimes begin to take on economically productive activities as early as 6 or 7 years of age, and may thus be most available for organized educational activities at an earlier age.

needs. Limited evidence[1] suggests that parents have a strong interest in knowledge and skills relating to various aspects of childrearing. Thus, content based on nutrition, health, and stimulation of young children could be one aspect in adult literacy and basic skills programs. Indeed, it's surprising to see that there is so little being done in this area. It could be argued that the ability to appropriately support the broader developmental processes of early childhood is the most basic of basic skills needed by the adults of a society.

High school and college students are potential educational agents (as volunteers receiving course credit, for example) in early childhood education programs. The trend in secondary education in many Latin American countries is to make that education more relevant to concrete societal needs. Training, and actual service, by high school students to work in programs for young children fits well with this trend.

In conclusion, there appears to be no need for the care and education of young children to be isolated from other levels and programs within the education system. It is not only that preschool education should be responsive to the needs of the primary system, but that both levels should be responsive to each other. Especially within the context of the previous discussions on making fuller use of all kinds of educational agents, and developing networks of support for preschool education, the relation of the preschool level to other levels within the educational system is an important question. It cannot be ignored in the planning and implementation process. Nonetheless, the historical tendency has been for preschool education to be almost totally isolated from the rest of the system, or be fully absorbed by the formal system, its methodology and its goals.

We would recommend that the preschool/elementary school nexus be a central focal point for future applied research programs. Since extensive formal school systems are in existence throughout Latin America, expansion of preschool education programs may be one effective way to address some of the major problems of these systems. The broader aspects of early childhood development should also be studied as an important content area for non-formal adult education efforts.

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[1] For example, from the program "Padres e Hijos" in Chile in a few of Peru's ESEPs, vocationally oriented secondary schools, particularly in the Lima area, there is already limited use of high school students for this purpose; also in the INEM vocational schools in Colombia.

Key Question № 9

What are the socio-cultural bases of program development?

To say that educational programs must be planned within the framework of language, values, behavior patterns, expectations, and competencies needed among a particular population, would seem to be a statement of the obvious. But large numbers of educational programs are planned without explicit attention to these socio-cultural bases. An example might be the education received by Quechua and Aymara Indians in the Andean highlands.

Until recently, concern for socio-cultural bases of program development has not been obvious in the planning of preschool programs in many Latin American countries. This is because such programs reached largely middle and upper class urban populations. With the recent trend of re-focusing action towards marginal urban and rural poor children and families, these bases become more pertinent.

While respect for traditional socio-cultural values and patterns is an obvious necessity when planning preschool intervention programs with and for ethnic and linguistic minorities, it is often not so obvious among seemingly acculturated populations. Yet values and behavior patterns are determined not only by cultural tradition, but by immediate environmental demands. Thus, many behavior patterns--for example childrearing behaviors--are functional responses to environmental stresses and threats. For example, the increasingly common goal of early intervention programs in Latin America is to modify seemingly harmful and dysfunctional parental goals and behaviors. Yet, anthropological evidence indicates that parental goals and behaviors are usually functional adaptations to unique environmental threats to infants and young children. While individual behaviors may be harmful to the child, the total pattern is functional.

A preschool program might have as one of its goals to give the young child abilities that would aid him or her in being more effective in acting on his or her environment; the same goal would be pertinent to work with parents. It is not at all clear that the goals of preschool education for the poor should relate totally, or even primarily, to preparation of children for first grade.[1]

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[1] Quite often it is parents themselves, particularly parents of poor children, who demand that a preschool program prepare their children for success in first grade.

A counter-argument is that by affirming values, goals and behavior patterns of ethnic minorities and the poor through a preschool program, these groups are being reinforced in values and behaviors that will keep them out of the mainstream socially and economically. If the only path to adult success is through the formal school system, then not concentrating on preparing young poverty children for success in this system is to assure that they will remain marginal to society. By not inculcating in them values and behaviors, which, though contrary to those of family and ethnic group, are those demanded by the modern sector, these children are effectively excluded by this sector. Yet, why should the burden fall on these young children and their families?

Perhaps one way to balance respect for traditional cultural patterns and the need to attack young child problems through intervention is to try to better understand the roots of these problems. This is one reason research on the young child in Latin America is being considered a key issue in preschool education planning. For example, malnutrition in young children has its roots not only in particular parental behaviors, beliefs, and knowledge, but in patterns of distribution of food in the community and in society in general. The phenomenon of dropping out and repeating in first grade has educational, socio-economic, cultural, and in some cases political, roots.

Perhaps the conflicting demands for cultural sensitivity and realism vis-a-vis the necessity to prepare the child for success in formal schooling can be reconciled by viewing the preschool education mandate as working with parents to provide young children opportunity to break out of the poverty cycle. Preschool education should not replace, but rather complement and support the family in its efforts to make the child a competent adult capable of maximizing opportunity for academic and economic achievement.

Key Question № 10

What are the research needs in early childhood education in Latin America?

One constraint to effective decision making in the above and many other areas within preschool education in Latin America has been lack of an organized body of research data on the young

child. Many individual areas of research remain largely unexplored; in other areas there is adequate data, but this data is either not accessible or has not been interpreted into forms suitable for use by nonspecialists and educational policy makers. A common complaint among many concerned with the young child in Latin America is that "we don't know what we know".

Thus, there are two broad needs with respect to research. One is for more research. The other is for systematization and dissemination of what has been done already.

With respect to the former, a number of areas in need of further exploration stand out. One area is anthropological research on the young child; included would be research on current childrearing patterns, socialization processes, competencies required in various settings, parental expectations, language development, cognitive styles in various settings (problem solving orientation, etc.), social bases of young child nutrition and health care, and distinctive and common threats to the young child's psychological and social development in various environments, in particular poverty environments, in Latin America.

There has been little research on patterns of young child deprivation within the contexts of rural-urban, highland-coastal and ethnic differences. This data, along with anthropological data on demands placed by various kinds of communities on the child, would provide an as yet uncharted socio-geographic framework for intervention decisions. Research is needed on factors actually influencing demand for child care and early childhood education in various countries. On an inter-country basis, there has been much more research on the situation of the young child in some countries than in others. This includes research identifying the location and size of the young child population in need of intervention.

The problem of systematization of available data, and development of mechanisms for dissemination, appears to be amenable to solution using basic systems of information sharing and storing available in the United States and Europe. There are a number of educational research agencies throughout Latin America capable of working on the problem of identification and organization of available data. The idea of national early childhood documentation centers in each country, and for the region, is not too far fetched. The Interamerican Institute for The Child resource center in Montevideo, Uruguay may present a useful resource to build upon in this regard.

Would early childhood policy makers and others use this data if it were available? There seems to be more interest,

at present, in data on the effects and potential of various intervention strategies. Planning programs in relation to concrete needs of young children identified through research appears to be uncommon. This type of planning would be particularly important in countries with significant internal socio-geographic diversity, such as the Andean countries.

In conclusion, as investment in early intervention programs increases, concrete knowledge of the situation of young children becomes an important tool for decision-makers at national, regional and local levels. To say that there has been enough research, and that it is time for action, is to sanction continued decision making on the basis of convenience and political expediency. Small pilot programs that have done environmental analyses and used the results to plan their programs have found the baseline information collected very valuable. There is no inherent conflict between continuing research on the young child, and using what is already known to plan programs of action.

We would make two recommendations in this regard.

First, special priority should be given to research projects which create additional data on:

- *the longitudinal effect of preschool on the formal educational process.*
- *the key variables that differentiate individual programs and what is known about the effectiveness of alternative strategies in different settings.*
- *what is actually occurring between adult and child, and child and environment and family and program in existing preschool programs; does the quality of services warrant continuation or expansion?*
- *how the mass media and other non-formal educational techniques can be used to bridge the 90% gap that currently exists in preschool educational service.*

Second, international agencies should assist in the development of an information-sharing system among Latin American countries in the field of early childhood development. This might include a central documentation center, libraries, journals and probably a series of policy papers.

Conclusion

The key questions discussed in this chapter provide a broad representation of issues central to preschool program planning and implementation in Latin America. While all the issues arise from actual conditions and constraints in the three countries surveyed in this study, by no means are all considered seriously when plans are made to develop programs. It does appear on the basis of interviews and literature review that there is increasing awareness of the key issues among Latin American early childhood policy makers. But actual decisions are presently made, or so it seems to the authors of this report, with only minimal consideration of these issues.

For example, in spite of evidence that large, expensive center-based programs, using high levels of professional personnel, will never be able to reach more than a very small percentage of young children in need of services, all three countries are continuing to rely on such programs as the basis of preschool education activities. Efforts to change patterns of parent and other community member participation to more fully use community level resources and to support community generated efforts have been very limited in scope.

In another area, little effort is being made to define more clearly the concept of integral attention, in spite of the fact that its lack of definition continues to inhibit effective formulation of program strategy and content. Yet integral attention remains a key concept for program planning and decision making.

International agencies, including those that have focused for decades on improved welfare of children, concentrate efforts on physical provision. With a few notable exceptions, policy makers reflect a general lack of awareness of the broader processes of early development and the effects of these processes on later human growth. Preschool intervention is seen as a "long shot" in a world where 3-year development programs are still attempting to resolve problems that have been around for centuries.

To an extent, the momentum of past patterns of early childhood education and development program intervention makes it difficult to conceptualize or implement significantly different strategies based on new knowledge and awareness. These patterns certainly are of no help to those outside the field to break through the traditional, institutional mold when thinking about ways to support the broader development processes in the early years of life. Changes in operation of existing programs have tended to be incremental, and take the form of slight modifications. Even when basic reorganization of administrative structure and program definition have

taken place, the program emerging for the child has tended to not differ significantly from past models. New and truly innovative initiatives are few and far between and viewed by human resource decision makers as quite marginal to the central thrust of their program responsibilities.

Much of this lack of awareness and/or interest on the part of policy makers lies squarely with the educational and educational research communities, the things we attempt to do with the children, the way we describe what we do, and how we conceptualize our research. The reasonable social development decision maker might not be convinced that the most urgent need of a malnourished or sickly child in the hinterlands is to be turned over to institutions to learn the color yellow, or how to handle a pencil, or how to sing a song, or how to follow-the-leader. The instructional goals and level of intellectual activity reflected in most existing preschool programs has lagged far behind recent advances in developmental psychology. The organizational, training and staffing procedures we develop too often work against, rather than reinforce, the strong participatory and self-help thrust of many of the more convincing national development strategies. Our curriculum models almost completely ignore the important cultural, family and community influences that inevitably determine the quality of the early childhood development process.

ATTACHMENT A

THE VARIABLES

In this attachment we will discuss the variables that have been identified that influence the decision making process in early childhood education in Latin America. Like the key questions discussed in the last chapter of the report, these variables were selected on the basis of (1) evidence from data collected in the three country studies, (2) importance given to them in the background documents analyzed in the literature review, and (3) the experiences of the project investigators.

The variables identified have been divided into three groups: one group includes the objective reality, the "givens" within a country; a second group includes the variables that mediate the objective reality, the human filter as evidenced by knowledge and attitudes; and a third group includes the administrative and programmatic reality of early childhood education as it currently exists.

It is through the interaction of these three variable sets that programs are created. Individual variables from each of the three groups act on variables from other groups. For example, variables Nº 1 and 2 interact because the poor in Latin America tend to have more children than the wealthy. These two variables interact with variable Nº 18, the socio-economic breakdown of the young child population currently receiving services.

Attachments

A. The Variables

B. An Annotated Bibliography

Following are the variables:

The objective reality:[1]

(1) The rate of growth of the young child population.

(2) The percentage of the young child population growing up in poverty.

(3) The particular set of priority problems of young children in a country, or within regions of a country.

(4) Effective demand for child care due to social and economic change factors: labor force participation of women, changing childrearing patterns due to urbanization and new technologies, etc.

(5) Existence within a country of significant (in influence) ethnic and/or linguistic minority groups (e.g., in the Andean countries, the Quechua and Aymara populations).

(6) The urgency of other (not specifically young child related) problems of human concern.

Knowledge and attitudes

(7) The level of knowledge and awareness with respect to:

a) the importance of adequate experience in the early years;

b) how various family and community environment influence early experience; and

c) how early intervention programs can influence early growth and development.

(8) The prevailing socio-cultural context that determines childrearing goals, practices, and attitudes about the role of the home and of institutions in the provision of services to the young child.

(9) The availability and use of research on the situation and needs of young children.

(10) The availability of evidence concerning the short and long term effects of various early childhood programs within different environments.

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[1] Pertaining generally to the situation of young children and their families.

(11) Implicit and explicit views about the purpose of preschool education (i.e. preparation for first grade, provision of child care, as an investment or as a consumption activity).

Administrative and Programatic Variables

(12) The existence or lack of a clearly identifiable policy for meeting young children's needs.

(13) Historical pattern of development of early childhood education.

(14) The specific goals of current early childhood programs.

(15) The content and extent of plans for early childhood education; the nature of the planning process (who is involved, resources allocated for planning).

(16) Locus of administrative control of action on behalf of young children.

(17) Locus of financial control of action on behalf of young children.

(18) The proportion of the young child population currently receiving services; the socio-economic breakdown of the young child population receiving services.

(19) The public-private breakdown of current total preschool enrollment and the role of private preschool programs in meeting young children's needs.

(20) The level of activity and priority concerns of international agencies working in a particular country; the influence of these agencies on early childhood program decision making.

(21) The general level and kinds of involvement of parents and para-professionals in formal and non-formal early childhood education programs.

(22) Availability of human resources to develop early childhood programs.

(23) The extent of current early childhood education infrastructure.

(24) The types of curricula already developed and/or potentially available to be used.

(25) The influence of early intervention activities in other sectors (i.e. number of children reached, political support, popularity).

(26) The professional background and training of those making decisions concerning early childhood education in a country (e.g., education, sociology, law, politics, nutrition, health).

Discussion

Since each of these variables interacts in some way with every other variable, there are a total of 625 individual interactions taking place when planning and program decisions are being made. (See Figure 1) No planner or policy maker is going to be conscious of the large majority of these interactions; nor will he or she wish to consider all of them when making decisions. What is important is to be aware of these variables and their dynamic interactions as the structure in which decisions are made.

For example, variable № 4 "Demand for child care due to economic and social change factors", influences and is influenced by variable № 8, "The prevailing socio-cultural context for child-care." Both of those influence and are influenced by variable № 15, the "Content and extent of plans for early childhood education". To get a broad perspective the decision maker would go down the above related list and use it as a form of check-off: did I consider this, this and that, and how it will influence such and such programmatic decisions.

Specifically, as a first step a decision maker would want to describe briefly the status of each of the variables within his or her country. Table 1 provides a picture of how this might appear, using the three countries analyzed in the present study. Then he or she would want to systematically examine each variable-pair interaction, flagging those interactions deemed important to the particular decision being made. Figure 2 provides the total picture, with each interaction numbered, so a decision maker could mark those interaction pairs to be a deliberate consideration, and those forming the secondary, or background, context.

FIGURE 1

Status of "Variables Influencing Decision Making" for Chile, Colombia and Bolivia

Variables	Country		
	Chile	Bolivia	Colombia
(1) rate of growth of young child population	1.4 %	2.6 %	3.2%
(2) percentage of young child growing up in poverty	30 % (est.)	80 % (est.)	60-70 % (est.)
(3) set of priority problems of young children	1. psycho-social 2. nutritional 3. health	1. health 2. nutritional 3. psycho-social	1. nutritional 2. health 3. psycho-social
(4) effective demand for child care due to social and economic change factors	fairly high level of demand	low level of demand	moderate level of demand
(5) existence of significant numbers of ethnic and/ or linguistic minority groups	none	yes (Quechua, Aymara Indian population)	none
(6) urgency of other problems of human concern	none relatively more urgent than education	health and nutritional situation highest priority problems.	health and nutritional situation highest priority problems

Figure 1
page 2

Variable	Country		
	Chile	Bolivia	Colombia
(7) Level of knowledge and awareness of importance of adequate early experience and influence of family and community on that experience	high among specialists low among population.	low among specialists and population	high among specialists low among population.
(8) prevailing socio-cultural context of child caring goals, practices, attitudes			
(9) availability and use of research on situation and needs of young children	moderate	low	high
(10) Available evidence concerning short and long term effects of various early childhood programs	moderate	low	moderate
(11) Implicit and explicit views of purpose of preschool education	changing from consumption to investment orientation; preparation for first grade	preparation for first grade	changing from consumption to investment orientation; preparation for first grade
(12) Existence or lack of clearly identifiable young child policy	broad guidelines	none	broad guidelines

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Figure 1
page 3

Variable	Country		
	Chile	Bolivia	Colombia
(13) Historical pattern of development of early childhood education	long history	recent history	recent history
(14) Specific goals of current early childhood programs	provision of "integral attention" preparation of children for first grade	not clear	vary by program, but centered on concept of "integral attentior
(15) Content and extent of plans for early childhood education; nature of planning process	short range plans (long range plans in discussion)	none	medium range plans
(16) Locus of administrative control of action on behalf of young children	centralized, in the public sector	centralized, in the public sector	decentralized, in the public and private sectors
(17) Locus of financial control of action on behalf of young children	centralized, public and semi-private	centralized, public	centralized, public ar semi-private
(18) Proportion of young child population currently receiving services; socio-economic breakdown of this population	9.4 39-50 % low SES	7.9 (no data)	5 10-20% low SES

Variable	Country		
	Chile	Bolivia	Colombia
(19) Public-private breakdown of current preschool enrollment; role of private preschool in meeting young child needs	public - 81 % private 19 %; small role private preschools	public - 75% private - 25%; small role private preschools	public - 31% private - 69 %; large role private preschools
(20) The level of activity and priority concerns of international agencies working in a country	slight	none	moderate
(21) Level and kinds of involvement for para-professionals and parents in formal and non-formal programs	slight	slight	slight
(22) Availability of human resources to develop early childhood programs.	high	low	high
(23) Extent of current early childhood education infrastructure	fairly widespread	limited	widespread in urban areas
(24) The type of curricula already developed and/or potentially available to be used			
(25) Influence of early intervention activities going on in other sectors	strong, well developed	limited	moderate
(26) Professional background and training of those making decisions			

The Interaction of The Variables

	1	2	3	4	5	6	7	8	9
(1) Rate of growth of young child population		1	2	3	4	5	6	7	8	9
(2) Percentage of young children growing up in poverty.	10		12	13	14	15	16	17	18	19
(3) Set of priority problems of young children	21	22		23	24	25	26	27	28	29
(4) Effective demand for child care due to social and economic change factors	30	31	32		33	34	35	36	37	38
(5) Existence of significant numbers of ethnic and/or linguistic minority groups	39	40	41	42		43	44	45	46	47
(6) Urgency of other problems of human concern	48	49	50	51	52		53	54	55	56
(7) Knowledge and awareness of early experience and influence of family and community experience	57	58	59	60	61	62		63	64	65
(8) Prevailing socio-cultural context of child caring goals, practices, attitudes	66	67	68	69	70	71	72		73	74
(9) Availability and use of research of attention and needs of young children	75	76	77	78	79	80	81	82		83
(10) Available evidence concerning short and long term effects of various early childhood programs.	84	85	86	87	88	89	90	91	92	
(11) Explicit and explicit views of purposes of preschool education.	93	94	95	96	97	98	99	100	101	102
(12) Existence or lack of clearly identifiable young child policy	103	104	105	106	107	108	109	110	111	112
(13) Historical pattern of development of early childhood education	113	114	115	116	117	118	119	120	121	122
(14) Specific goals of current early childhood programs	123	124	125	126	127	128	129	130	131	132
(15) Content and extent of plans for early childhood education; nature of planning process.	133	134	135	136	137	138	139	140	141	142
(16) Locus of administrative control of action on behalf of young children	143	144	145	146	147	148	149	150	151	152
(17) Locus of financial control of action on behalf of young children	153	154	155	156	157	158	159	160	161	162
(18) Proportion of population currently receiving services; socio-economic breakdown of this population.	163	164	165	166	167	168	169	170	171	172
(19) Public-private breakdown of current preschool enrollments; role of private sector in meeting basic needs.	173	174	175	176	177	178	179	180	181	182
(20) The level of activity and priority emphasis of international agencies working in a country	183	184	185	186	187	188	189	190	191	192
(21) Level and kinds of involvement for para-professionals and parents in formal and non-formal programs.	193	194	195	196	197	198	199	200	201	202
(22) Availability of human resources to develop early childhood programs.	203	204	205	206	207	208	209	210	211	212
(23) Extent of current early childhood education infrastructure.	213	214	215	216	217	218	219	220	221	222
(24) The type of curricula mixed, developed and/or potentially available to be used.	223	224	225	226	227	228	229	230	231	232
(25) Influence of early intervention activities going on in other sectors.	233	234	235	236	237	238	239	240	241	242
(26) Professional background and training of those having	243	244	245	246	247	248	249	250	251	252

	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
(1) Rate of growth of young child population	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
(2) Percentage of young children growing up in poverty.	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
(3) Set of priority problems of young children	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
(4) Effective demand for child care due to social and economic change factors	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
(5) Existence of significant numbers of ethnic and/or linguistic minority groups	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
(6) Urgency of other problems of human concern	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
(7) Knowledge and awareness of early experience and influence of family and community experience	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115
(8) Prevailing socio-cultural context of child caring goals, practices, attitudes	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130
(9) Availability and use of research of attention and needs of young children	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145
(10) Available evidence concerning short and long term effects of various early childhood programs.	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
(11) Explicit and explicit views of purposes of preschool education.	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175
(12) Existence or lack of clearly identifiable young child policy	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190
(13) Historical pattern of development of early childhood education	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205
(14) Specific goals of current early childhood programs	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220
(15) Content and extent of plans for early childhood education; nature of planning process.	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235
(16) Locus of administrative control of action on behalf of young children	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250
(17) Locus of financial control of action on behalf of young children	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265
(18) Proportion of population currently receiving services; socio-economic breakdown of this population.	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280
(19) Public-private breakdown of current preschool enrollments; role of private sector in meeting basic needs.	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295
(20) The level of activity and priority emphasis of international agencies working in a country	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310
(21) Level and kinds of involvement for para-professionals and parents in formal and non-formal programs.	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325
(22) Availability of human resources to develop early childhood programs.	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340
(23) Extent of current early childhood education infrastructure.	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355
(24) The type of curricula mixed, developed and/or potentially available to be used.	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370
(25) Influence of early intervention activities going on in other sectors.	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385
(26) Professional background and training of those having	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400

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FIGURE 2: Variable Interaction Chart

ATTACHMENT B

AN ANNOTATED BIBLIOGRAPHY

In the following pages, the numbers in parenthesis after the bibliographic entries refer to the following categories:

1) Studies on the situation and priority needs of young children in developing countries.

2) Studies on the rationale for investment in early intervention in developing countries.

3) Studies on early intervention efforts currently underway in Latin America, chiefly educational.

4) Studies examining broad progress and trends in early intervention in North America and other areas, relevant to Latin America.

Bernard van Leer Foundation. Advisory mission to Colombia on Early Childhood Education. The Hague, Netherlands, 1976. (3)

After providing a background of Foundation activities in early childhood education in developing countries, and discussing some broad theoretical issues relating to early intervention programs, the report reviews the potential and constraints of "Ley 27", Colombia's Law mandating the creation of a national system of Integral Care Centers. A plea is made for flexible interpretation of the Law, in order to better meet needs in varying circumstances, and a warning is provided against under-emphasizing the educational element of the planned integral care program.

Berrueta-Clement, J; Angel, B. de; Christiansen, N.; Labrador, L.; Mora, J.O.; Navarro, L. de; Ortiz, N.; Vuori, L., Herrera, M.G. A home-visit-based parent-infant interaction program for children of urban low income families in Bogotá, Colombia: Description of the program and some results from the first year of child life. Bogotá: Instituto Colombiano de Bienestar Familiar-Harvard University Research Project, 1977. (Draft Report)

This report describes partial results of an ongoing longitudinal study of the effects of various combinations (psycho-educational, nutritional, health), lengths, and timing of intervention with 456 families in Bogotá with social situations putting young children at risk of malnutrition. The educational component consists of a weekly home visitor who works with family members on their style of interaction with and observation of the infant, with the aim of developing in care-takers, behaviors and attitudes conducive to the infant's intellectual and physical growth.

Study children were selected before birth from mothers in the second trimester of pregnancy, who had already malnourished young children. The nutritional supplement goes to the pregnant mothers, and then to the rest of the family.

Early results indicate that both nutritional supplementation and infant stimulation have significant effects on infants' cognitive development, with the former tending to have more effect on motor development.

Birch, H.G., Malnutrition, Learning and Intelligence. American Journal of Public Health, 62, 6, 773-793, 1972.

The author analyzes the (causes and) effects of nutritional and related environmental factors on the cognitive functioning of young children from populations at risk of malnutrition. The author demonstrates the difficulty of identifying causes for poor intellectual functioning using retrospective (follow-up) techniques for studying malnourished children.

Also analyzed are the inter-generational effects of poor nutrition--women at risk as young children are far more likely to have children at risk or actually suffering from malnutrition.

Finally, the author warns of the danger of over-simplification when analyzing the effects of environmental influences on the intellectual development of the child. It is a complex of interacting factors that affect early development.

Brazelton, T.B. Implications of Infant Development Among The Mayan Indians of Mexico. Human Development 15, 90-111, 1972.

The author examined the development of infants of the Zinacanteco, highland Mayan Indians of southeastern Mexico. He used qualitative and quantitative measures to observe physical growth, central nervous system development, cognitive development, and childrearing behavior of the mothers, beginning with the prenatal period.

The author found that although the environment poses physical hazards to the child—there was evidence of subclinical malnutrition, frequent infection and hypotic effects (due to altitude)-- the infants of the Zinacanteco develop in a parallel fashion to U.S. infants in the motor, intellectual and social areas (though about one month delayed). He suggests that childrearing techniques, and the children's organisms, have adopted to environmental demands. Young children's behavior, characterized by conformity and unquestioning fulfillment of roles, was a functional response necessary for survival in that milieu.

Implications are that particular child-rearing strategies and competencies in infants develop as a response to environmental demands.

Bronfenbrenner, Urie. Is Early Intervention Effective? Teacher's College Record. 76, 2, 279-303, 1974.

The author analyzes the findings from selected early intervention programs that have available follow up data on trends after termination of intervention and also data on a matched control group. Seven projects are analyzed, including center and home based, infant and preschool programs. The highlights of the findings of these projects are discussed, and the author attempts to put the findings together in a series of recommendations scattered through the report, including support for the idea of "massive ecological intervention"-- The author finds the family as the most economical and effective system "for sustaining the child's development", thus indicating integral parental involvement as a key to program success.

Brozek, J., Coursin, D.B.; Read, M.S. Longitudinal Studies on the Effects of Malnutrition, Nutritional Supplementation, and Behavioral Stimulation. Bulletin of the Pan American Health Organization. 11,3, 237-249, 1977.

The authors review available data from six longitudinal studies ongoing or recently completed, looking at the effects of various combinations and lengths of intervention on the mental and physical development of young children at risk of, or suffering from, malnutrition. The studies have been undertaken by (1) the Colombian Institute of Family Welfare in Bogotá, Colombia; (2) the Human Ecology Research Station in Cali, Colombia; (3) the Institute of Nutrition of Central America and Panama in Guatemala City, Guatemala; (4) the National Institute of Nutrition, Mexico City, Mexico; (5) the Children's Hospital, Mexican Institute of Child Welfare, Mexico City; and (6) Colombia University School of Public Health, New York City. Data on the projects is still being analyzed, but preliminary findings indicate that both nutritional supplementation and psycho-educational stimulation have behavioral effects lasting up to 3-4 years after termination of intervention. Nutritional supplementation of the mother affects birthweight of the infant. Effects vary based on timing and length of intervention.

Bruner, Jerome. Poverty and Childhood. In the Relevance of Education, New York, W.W. Norton, 1973.

The author reviews the evidence on the effects of poverty on the development of the young child. The majority of the evidence examined is from the United States, but there are a number of studies from developing countries mentioned. The author argues that poverty has a harmful effect on the development of various cognitive abilities and on motivation and goal seeking, particularly when this poverty environment is compared to the middle class environment. There is a brief discussion of the "context-free"-universal and context-sensitive aspects of development in the young child. Also, the author discusses early childhood intervention in terms of inculcation into poor children skills that will enable them effectively to change the environments which lead to their poverty.

Caldwell, Bettye. The Rationale for Early Intervention. Exceptional Children, Young Children. Summer, 1970.

The author reviews the literature offering rationale for intervention in the lives of young children. She identifies two classes of rationale-inferential and empirical-among which are (1) the animal studies dealing with the behavioral effects of early experience, particularly the effects of deprivation; (2) the comparative and developmental studies of children reared in different environments; (3) the major conceptual analyses of the role of experience in development (e.g., the work of Bloom and Hunt); and (4) actual studies of intervention efforts.

A thoughtful warning is presented against overselling the potential effects of early intervention, and then being judged on those promises.

Centro del Desarrollo de la Educación No-Formal/Fundación para la Educación Permanente en Colombia. (1) Desarrollo infantil y educación no-formal: Diseño y progreso de un estudio piloto. (2) Desarrollo de niños de 0-24 meses a través un modelo de educación no formal en nutrición, salud y estimulación. Bogotá, 1977.

Description of a non-formal education project in one of Bogotá's barrios, seeking to determine the effectiveness of a program of parent education in stimulation, nutrition, and health of infants 0-24 months. The model uses group meetings, home visits, and mass media to try to motivate mothers to assist their infants' intellectual and physical growth. A midpoint evaluation, citing mixed results thus far,

is described.

Centro de Investigación y Desarrollo de la Educación (CIDE). Proyecto Padres é Hijos. (1) Informe histórico; (2) Presentación resumida; (3) Una investigación en acción en el área rural de Limache y San Felipe, Santiago, Chile, 1976.

A report of a parent education project in a rural area of central Chile whose purpose is to foster the intellectual and physical development of young rural children. Specific objectives are to develop in the parents, in particular the mother, skills for stimulating the young child, attitudes conducive to creating a healthy atmosphere for childrearing, and motivation to act on their environment on behalf of their children. The project, ongoing, uses the primary school teacher as a parent educator. The work with parents revolves around certain generating themes concerning the young child's developmental needs. There are both experimental and control groups in the project. Evaluation of children and of the parents in treatment and control groups is done before, during and after the project, using the Weschler Intelligence Scale standardized for a population of urban Chilean children. Changes in behaviors and attitudes of the mothers are to be measured by a structured questionnaire developed by the project team.

Craviato, Joaquín; De Licordie, Elsa. The Effect of Malnutrition on the Individual. In A. Berg, N. Scrimshaw, and D. Call (editors), Nutrition, national Development and Planning, Cambridge: MIT Press, 1973. (1)

This study examines the effects of malnutrition, in particular protein calorie malnutrition, on individual (early) human development, and also the interaction of malnutrition with environmental and biological factors. Particularly valuable is the analysis of the effect of malnutrition on learning and intellectual development. Malnutrition is shown to cause loss of learning time during critical developmental periods, and also motivational and personality changes. Since malnutrition affects young children particularly harshly, and since the majority of young children in developing countries suffer from malnutrition, this study provides an important conceptual basis for planning of early intervention activities.

Fundación de Jardines Infantiles. Plaza Preescolar Santiago de Chile, 1977 (Project Director: Dr. Samuel Nalegach).

Description of a program in one of Santiago's barriadas for low socio-economic status children 2-5 years old. The program used para-professionals to provide a program of directed and free educational activities, in low cost centers built on centrally located land in the barriada. There were 88 sessions in the program and pre and post tests of psychological and motor development were conducted on the children involved (200) and a control group.

The tests used were the Lezine and Brunet scales of psychomotor development for the 2-4 year old groups, and the Stanford Binet intelligence test for the 4-6 year old group. The only significant differences in test scores reported are between pre and post test scores for the treatment groups and post-test control and experimental scores for the 4-6 year old group.

Germani, Celia, Educación Preescolar en América Latina. Cambridge: Center for Studies in Education and Development, Harvard University, 1973.

This study reviews historical and present trends in preschool education in Latin America up to the early seventies. An examination of historical influencies on current developments-- principally European influences-- is made, and four steps in the evolution of programs throughout Latin America are described. Current policies (through law) and programs are described, with case studies on Brazil, Chile, Cuba and Perú. Specially emphasized is the urgent need for development of programs among marginal urban populations. Recommendations are made concerning various aspects of program development, including the need for diversity within countries, and the danger of over-centralized programs.

Grawe, Roger, Abilities in Preschool Children: Productivity Effects and Family Environmental Determinants, Washington, D.C., World Bank Staff Working Paper, 1977.

This study deals with three issues: the principal determination of adult earnings, in particular the influence of ability on adult earning; the family related determinants of ability in young children (e.g. income, mother's education, birth order); and the implications of United States and international findings on early intervention effectiveness. The author concludes that: methodological problems not withstanding, cognitive ability is shown to play a significant role in determining adult earnings, especially through its influence on ability to take advantage of schooling; significant family related influences on development of (cognitive) ability are mother's education, family income, and family demographic factors; and while it is too early to offer any conclusions on the effectiveness of early intervention in developing countries, certain programs--such as the Puno Non-formal Early Education Project--provide examples of promising approaches.

There is a serious lack of data (for policy makers) on intervention program effects in the developing countries, and research in this area should be a priority.

Gyorgy, P.; Burgess, A. (editors). Protecting the Preschool Child: Programs in Practice. London: Tavistock Publications, 1965.

Halpern, R., Early Childhood Education and National Development: A Case Study of Initial Education In Perú. Tallahassee, Florida: Florida State University, unpublished Ph.D. dissertation, 1977.

The author examines the national early childhood education program developed by Perú as part of that country's educational reform. Important components of the program-- goals, administration, teacher training, curriculum, materials and facilities, planning and evaluation-- are described, and their functioning analyzed. Program elements that the author views as central to the program's future development are discussed. These include parent participation, non-formal activities, intersectoral coordination, and mobilization of support for the program. Also

included as one of the appendices is a case study of a non-formal program developed in the rural highland department of Puno, Perú, some of whose aspects are potentially replicable in other Andean countries.

The author suggests that the program's ability to reach those young children in Perú most in need of services has been hindered by inability or unwillingness to seek out non-formal strategies and flexible administrative patterns more conducive to functioning in a context such as Perú's (i.e. scarce resources, and diversity of living conditions and cultural-linguistic patterns).

Hunt, J. McV., Parent and Child Centers: Their Basis in the Behavioral and Educational Sciences. In J. Frost (editor), Revisiting early childhood education. New York: Holt, Rinehart, and Winston, 1973.

The author reviews the rationale in social science research and theory for early intervention in the United States, with an emphasis on and bias toward the literature finding the poor as less competent on mainstream measures of various cognitive abilities (rather than on those studies finding the poor competent in different areas, or "culturally different"). The value of the article is in the clear explanation of the rationale for early intervention offered by the school viewing the poor as less competent from the non-poor. It is the same argument used by most early interventionists in the developing countries. Competence is defined by these interventionists as abilities, motivations, and standards of conduct required for academic and occupation success within increasingly technological cultures.

Jelliffe, D., Infant Nutrition in the Subtropics and Tropics. Geneva: World Health Organization, 1968.

The nutritional problems of young children in the developing countries are analyzed. The author describes the social and ecological bases for infant feeding practices, and some general considerations for programs of nutrition education. Must valuable are the annexes which describe specific actions that can be taken to deal with the nutritional problems of young children in the developing countries.

Jencks, Christopher. Inequality: A Reassessment of the Effect of the Family and Schooling in America. New York: Basic Books, 1972. (2)

Using the Coleman report as a data base, and gathering some of their own additional data, Jencks and colleagues analyze the interaction and effects of various variables on adult competence and achievement. Both school and nonschool variables are analyzed. With respect to the former, inequality in utilization are examined. With respect to the latter both genetic and environmental influences are examined.

The value of this report to an examination of the situation and intervention needs of young children in developing countries is the broad pattern of findings about factors that have relatively more influence on adult competence. In particular, Jencks and colleagues find that the early, nonschool factors have a greater influence on adult competence and achievement than the later school factors. They also suggest that educational intervention per se, at any level, does little to break down inter-generational patterns of socio-economic inequality.

Kagan, J., Klein, R., Cross-cultural Perspectives on Early Development. American Psychologist 28, 11, 947-961, 1973.

Based on data on the profile and level of cognitive abilities in rural highland Guatemalan and American children gathered at various points during the first year of life, and then at 10-11 years of age, the authors find that (1) retardation in the emergence of universal cognitive competences during infancy (found in the Guatemalan infants), is not predictive of later deficits in cognitive functioning. They posit the concept of resiliency of cognitive development: deprivation in the early years does not lead to deficit in later functioning; rather the onset of cognitive abilities is simply delayed. Experimental factors influence time of emergence but not emergence itself of cognitive abilities. The implications of the authors' findings for early intervention are that (1) environmentally produced retardation is reversible, and (2) particular socio-cultural contexts lead to particular patterns of development in the early years.

Kalakdina, Margaret, Critical Issues in National Planning for Children. Assignment Children. 25, 50-61, 1974. (4)

The author develops a scheme for planning the development of early childhood programs. Particularly valuable is an analysis of what should be considered when developing such programs, and the various factors that interact in program development.

Kessen, William (editor), Childhood in China. New Haven Yale University Press, 1975. (4)

This is the report of the visit to China by an American delegation specializing on early childhood development. There are articles on the Chinese family, preschools and other forms of child care in China, and health and nutritional factors. Perhaps the principal value of this book is the portrait of a country with scarce financial and professionally trained human resources committing itself to the provision of early childhood services to millions of young children. Described clearly is the close fit between the kinds and goals of early child care and education and the goals of China as a society. The economic and political motives for provision of early childhood services are also described (e.g. freeing women to join the workforce). Another revealing component of the study is the power of collective socialization of young children through the preschools.

Leiner, Marvin. Children are the Revolution: Day Care in Cuba, New York: Viking, 1974.

Levine, Robert. Parental Goals: A Cross-cultural View. Teacher's College Record 76,2,226-239, 1974.

The author demonstrates that parental values and behaviors with respect to childrearing are inevitably a function of particular environmental stresses and threats to the young child's well-being. Although particular behaviors may be damaging to the young child, the general pattern is invariably functional for protecting the child and preparing him or her for competent adult functioning in that environment.

The implication is that early childhood interventionists must be cognizant of and sensitive to the reasons for parental behaviors, especially as one of the goals of early intervention is often to modify these behaviors.

Magluf, Alegría. (1) Programa Experimental de Estimulación para Niños de 5 Años de los Pueblos Jóvenes de Lima que Evidencian Inmadurez para el Aprendizaje (1972); (2) Continuación y Ampliación del Programa de Estimulación para Niños de Pueblos Jóvenes que Evidencian Inmadurez para el Aprendizaje (1974). Lima, Perú: Ministry of Education, Directurate of Basic Regular and Initial Education.

These two studies report on an experimental program carried out in selected Initial Education Centers in the Pueblos Jóvenes (shanty towns) and marginal urban zones of Lima. The experimental and control groups consisted of 5 year old children who had demonstrated intellectual immaturity and low I.Q. scores on a battery of tests. Treatment for both studies went from May to November in 1972 and 1974, and consisted of regular individualized attention and a special curriculum. The control children continued attending regular I.E. classes.

Pre- and post-tests were administered to both groups of children, consisting of a battery of tests measuring various aspects of intellectual development. Results demonstrated significantly larger May to November gains for experimental children as compared with control children in scores on the test battery.

The treatment consisted of attention that would be extremely difficult to offer on a larger scale, given Perú's scarce financial and human resources in the early childhood area.

Mandl, P.E., Preparation of the Child for Modernization: Skills and Intellectual Requirements. Geneva: United Nations Research Institute for Social Development.

The author suggests that traditional child-rearing practices and socialization patterns are not preparing the young child in developing countries for the demands of modernizing, urbanizing societies. The skills, motor abilities, intellectual requirements, and affective orientations that prepare young children for success in traditional, rural environments, or situations of urban poverty, are not the same as those necessary for success in formal schooling or vocational work.

McKay, H.; Sinisterra, L.; McKay, A.; Gómez, H.; Llorada, P. Cognitive Growth in Colombian Malnourished Preschoolers. Cali, Colombia: Human Ecology Research Station, 1977.

A report on the results of an experimental multiple intervention program in Cali, Colombia among low SES preschool children suffering mild to moderate malnutrition. Different combinations of intervention (nutritional, psycho-educational, health control) were given for different lengths of time. The program began the interventions when the child was 3 years of age. The total treatment period was 3 years.

The authors found that after 3 years the comprehensive treatment group (psycho-educational stimulation, nutritional supplementation, health control) had manifested significant cognitive gains in relation to the nutrition and health treatment groups and a low SES well-nourished control group. In a recent follow-up report the authors report persistence of gains up to 8 years of age.

Mead, Margaret. Early Childhood Experience and Later Education in Complex Cultures. In M. Wax, S. Diamond, and F. Gearing (editors), Anthropological Perspectives on Education, New York Basic Books, 1971.

The author analyzes, at theoretical and case study levels, the effects over the long term of particular patterns of early socialization and education by parents and community. She suggests that parental emphases on particular sets of abilities and orientations toward literacy, abstract thinking, and language learning, have a powerful effect on the child's later ability to take advantage of formal schooling. She suggests that preschool children in particular groups within any society "may be learning ways of dealing with life that are radically opposed to the expectations on which the school system is built."

Mialaret, Gaston. La Educación Preescolar en el Mundo. Paris: UNESCO, 1976 (also in English). (4)

This study is a broad review of the state of early childhood education in the world. Questionnaires were sent out to a large number of countries, 70 were answered. Prevalent educational philosophies are examined, varieties in objectives, methods, and materials, kinds and levels of parent and community involvement, kinds and ages of children attending, and potential futures are examined. Little attention is paid to nonformal type activities.

Ministerio de Educación (Chile). (1) Anteproyecto Creación Centro de Atención Integral, 1976. (2) Proyecto de Jardínes Infantiles: Extracto del Proyecto, 1977. Santiago, Chile. (3)

These two documents describe Chile's program of Centers of Integral Care, a national program begun in 1976 in pilot form, that will provide early childhood services to urban children 2-6 years of age living in extreme poverty. It will be run by the Junta Nacional de Jardínes Infantiles, and is supposed to eventually reach 140,000 children.

Montenegro, Hernán; Rodríguez, Soledad; Lira, M. Isabel; Haeussler, Isabel M.; Bralic, Sonia. Programa Piloto de Estimulación Precoz para Niños de Nivel Socio-económico Bajo entre 0 y 2 años: Informe Final. Santiago, Chile: Servicio Nacional de Salud, 1977.

This is the final report on a pilot project directed by Dr. Hernán Montenegro and colleagues of Chile's National Health Service. The purpose of the program was to analyze the effects of home based training for low socio-economic status mothers in early stimulation of infants on the psychosocial development of the infants. Mothers in the treatment and control groups were chosen at random from among pregnant women visiting National Health Service clinics in a Santiago slum. The treatment was bi-weekly home visits by specially trained para-professional nurses. Manuals were developed for the mothers for each of the first 24 months of life, containing situations and approaches to stimulating the infant's psycho-social and physical development, guidlines on child care, etc. The home visits were used for instruction in the use of the manual.

Significant differences in psychological test scores of the infants between control and treatment groups began to appear at 3 months, and became statistically significant at around 12 months. The authors tentatively conclude that the treatment did have significant positive effects on intellectual development of the infants involved.

Mora, J.O., Períodos Optimos de Intervención en Niños a Alto Riesgo de Retardo en el Desarrollo. In Seminario Internacional sobre Estimulación Psico-Social Precoz del Lactante y Preescolar, proceedings of a conference held in Santiago, Chile, November 1977.

This report presents a broad review of the theoretical bases and practical considerations with respect to early intervention programs. Also discussed are selected current intervention efforts in Latin America.

The author describes three broad categories of high risk in infants and young children-- established risk, biological risk, and environmental risk-- and suggests the kinds of early intervention appropriate for each of the three categories. Also discussed are the optimum period of intervention, which depends on the kind of risk the young child is subject to, intervention aimed at the causal factors placing the young child at risk, and potential effects of intervention. A brief discussion of intervention programs in Cali, Colombia, Guatemala, and the United States is offered, and some comments on cost-effectiveness of early intervention programs are offered.

Morley, David, Pediatric Priorities in the Developing World. London: Butterworths, 1973.

An examination of priority problems and necessary services in child health in the developing countries. It includes a discussion of beliefs and attitudes towards child-rearing and disease, a description and discussion of "at risk" children, clinical manifestations of various problems, and home-based care and record keeping. This study contains information essential to anyone planning early intervention programs in any sector in the developing countries.

Nordberg, O.; Phillips, P.; and Sterky, G. (editors). Action for Children: Towards an Optimum Child Care Package in Africa. Uppsala: The Dug Hammarskjold Foundation, 1975. (1, 2)

Although basically an examination of the health problems and needs of young children in developing countries, this study also presents a clear argument for the interrelatedness of young children's problems in developing countries, and the need to act preventively in all spheres. An underlying theme is economic and social waste that occurs in developing countries when investment in young children is not made. The authors establish the child as the basis for young child planning, rather than a particular problem or need. The need for integrated services is argued.

Nurcombe Barry, Children of the Dispossessed. Hawaii: East-West Center, Culture Learning Institute, University of Hawaii, 1976. (4)

The author provides a clear, thoughtful examination of various beliefs about the nature of early childhood deprivation, and various approaches to early intervention. A conceptual framework for the development of competence in young children is developed, from a cultural relativist position. The author also describes an early intervention program for rural Aborigine children in Australia, using this case as a basis for discussing the ethics of intervention.

Oficina de Planificación Nacional (ODEPLAN); Banco Interamericano de Desarrollo (BID). Atención Integral a Menores en Extrema Pobreza Urbana. Santiago, 1977.

This is a feasibility study that examines the goals, potential benefits, and potential costs of Chile's national program of Centers of Integral Care (Centros de Atención Integral) for young children in urban poverty. Also included is an analysis of the size and location of the potential program target population (young children) using as a basis the "Map of Extreme Poverty", developed by Chile's Catholic University, outlining the number and location of Chile's poverty population.

Formulae for carrying out cost-benefit analyses for the program (still in its pilot stages) are laid out, including costs and benefits of half day versus full day programs, benefits to children through higher future cognitive and economic achievement, benefits to mothers through liberation of time to work outside the home, benefits to society through increased future productivity of children participating, etc. Costs of reaching various percentages of the young child population living in extreme urban poverty (estimated to be 220,000) are also included.

París Montesinos, Ana María de. Hogares de Cuidado Diario en Venezuela. Assignment Children 36, 87-92, 1976.

The author describes a home care program for working mothers in Venezuela, implemented by the Children's Foundation (Fundación del Niño). A group of volunteer mothers care for 5 children each during the day in their homes, providing basic nutritional and health care (with the assistance of a team of nurses and doctors), with resources provided by the Foundation. Educational stimulation is apparently being provided by young women from the communities, trained by a supervising kindergarten teacher, who spend free hours in the homes of the mothers providing care. The

program is running in barrios of Caracas and in other areas of the country.

Pollitt, Ernesto, On the Timing of Early Nutritional and Psychoeducational Intervention. In Seminario Internacional sobre Estimulación Psico-Social Precoz del Lactante y Preescolar, proceedings of a conference held in Santiago, Chile, November, 1977.

The author argues that there may be important differences in the sensitivity and vulnerability of the human organism to adverse or beneficial environmental effects at various times during the prenatal, infancy, and early childhood years, and that the effects of various interventions may thus be maximized or minimized depending on when they are applied and towards which abilities. It is demonstrated that at different developmental stages in the early years different "psychological dimensions interact with the environment".

To apply his argument the author analyzes multiple intervention programs in Bogotá, Guatemala, and the United States. As a result of theoretical and program evidence the author tentatively concludes that psycho-educational interventions are more likely to have beneficial effects when applied later during the second rather than the first year of life, and when continued over a period of time. Longitudinal findings reveal a consistent "wash out" effect in most studies.

Puffer, R.R.; Serrano, C.V., Patterns of Mortality in Childhood. Washington, D.C. Pan-American Health Organization, Scientific Publication Nº 262, 1973.

This is the final report of the Inter-American Investigation of Mortality in Childhood, a comprehensive field study of the causes of young child death in North, Central and South America. Particularly relevant are the findings as to the social bases of high infant mortality: mother's education, availability of health and other social services, etc. A significant finding is the centrality of nutritional deficiency as an underlying or associated cause in over 50 percent of young child deaths in the Americas.

Richardson, S.; Birch, H.; Hertzig, M., School Performance of Children Who Were Severly Malnourished in Infancy. American Journal of Mental Deficiencies. 77, 622-632, 1973.

Scribner, S.; Cole, M., Cognitive Consequences of Formal and Informal Education. Science 182, 553-559, 1973.

Based on the findings of their own field work in Africa, and evidence from other countries, the authors suggest that the knowledge base, value system, dominant learning situations, and functional learning system of the school (formal) are often in conflict with those of the home and community (informal). The demands of formal schooling on the child are discontinuous with those of every day life, and "it seems unreasonable to expect masses of children to cope successfully" with the demands of schooling. These findings have important implications for those contemplating early intervention in the developing countries, particularly as these programs are the child's first contact with the formal learning system.

Selowsky, Marcelo, A Note on Preschool Age Investment in Human Capital in Developing Countries. Economic Development and Cultural Change. 24,4, 707-721, 1976.

The author develops an argument for greater investment in early intervention programs based on the assumption that the child's abilities and potentialities when he enters school are the most influential factors in determining how well he will be able to take advantage of the school environment, and thus his eventual adult achievement. He develops an equation representing production of cognitive and non-cognitive performance at adult age, in which he demonstrates the influence of early factors on school achievement and later adult abilities. The author also analyzes the components of ability brought to school by young children, and demonstrates that at least some of them are amenable to early intervention.

Selowsky, Marcelo; Taylor, Lance. The Economics of Malnourished Children: An Example of Disinvestment in Human Capital. Economic Development and Cultural Change 22, 1, 17-31, 1973.

The authors examine the potential adult earnings profiles of Chilean children beginning life under various environmental conditions. They find that malnourished children are likely to earn considerably less over the years than well nourished children from similar environmental backgrounds (thus decreasing

national productivity). Their findings are based on an assumption of lower-initial ability due to malnutrition and less consequent ability to take advantage of schooling.

The value of this study is in the methodology provided for examining the long term effects of early childhood disadvantages. The authors propose that failure to invest in young children is a form of disinvestment in human capital formation in developing countries.

Sicault, George (editor). The Needs of Children. New York: UNICEF and the Free Press, 1963. (1)

This study is a broad examination of the needs of children in developing countries. Although somewhat dated, the needs outlined in the study have still not been met. The first part of the study is a UNICEF report. The second part contains reports by WHO, FAO, UNESCO, the U. N. Bureau of Social Affairs, and the I.L.O., on health, nutritional, educational, social welfare, and vocational needs. Part three contains country case studies, including Chile and Perú in Latin America. Most striking is the fact that the problems outlined, malnutrition, high infant mortality and morbidity rates, high dropout and repeating rates in primary school, and others, are not only still serious 14 years later, but have worsened in some countries.

Simmons, J., Education, Poverty and Development. Washington, D.C., World Bank, Staff Working Paper Nº 188, 1974.

The author reviews the evidence on the effectiveness and efficiency of formal education systems in developing countries in contributing to re-distribution of cognitive and economic achievement in later years. He finds that non-school inputs are more influential than school inputs in determining achievement in later years. In particular, he finds that "early factors which determine cognitive and non-cognitive traits need increased understanding and investment."

Singer, Hans, Children in the Strategy of Development. N.X.: United Nations Center for Economic and Social Information, 1972.

This study argues that young children are a tremendously important potential human resource, and that investment in programs for young children in the developing countries is one key to national development. Various approaches to analyzing young children's needs and

planning programs for them are presented. A strong and clear argument for greater investment in meeting children's needs is woven throughout the study. The importance of coordinated national policies is analyzed.

Singh, Tarlok, Unifying Approaches in Planning for Children. Assignment Children 14, 17-27, 1971.

The author discussed the impediments to integrated planning and programming for young children in developing countries, and the urgent necessity of integrated planning and programming, given the source resources allocated to meeting young children's needs.

Isolated actions, according to the author, do not provide a solid basis for long term social development, based on provision of services to the most disenfranchized. As the author writes, in analyzing problems we stress the linkages; but when we act, we act in isolated bits and pieces.

Smilansky, M. Priorities in Education: Preschool; Evidence and Conclusions. Washington, D.C. World Bank Staff Working Paper, 1977.

The author reviews the available evidence on the cognitive effects of early intervention programs in the United States, and finds that only those programs with very sophisticated and expensive approaches brought about significant gains in I.Q. on children involved, and even in these programs gains tend to fade 2-3 years after termination of involvement. More promise of sustenance of gain has been shown with respect to programs involving parents in integral roles (generally mothers). The author does not address the question of other effects-- motivational, long term achievement, socio-emotional, etc.-- and his pessimism is only legitimate with respect to I.Q. gains.

Tjossen, Theodore (editor), Intervention Strategies for High Risk Infants and Young Children. Baltimore: University Park Press, 1976.

Although aimed at intervention with young children at risk for biological and psychological reasons, this collection of studies provides many excellent approaches applicable to intervention with young children at risk due to environmental reasons. Included are theoretical studies on various early childhood disabilities, studies on identification and diagnosis of children in need of intervention, and a comprehensive section describing a number of demonstration projects. A brief report on the state-of-the-art in Latin America is included.

The section on demonstration projects contains many excellent approaches potentially adaptable to various Latin American contexts, particularly the elements dealing with parent participation and education.

UNICEF. Country Studies on the Situation of the Child. New York, 1970-1976.

In the early seventies UNICEF carried out a series of studies on the situation of the young child in selected Latin American and Carribean countries. These studies analyzed (1) the general socio-economic contexts in which young children are growing up; (2) the situation of the family in terms of roles, responsibilities, problems; (3) priority young child problems-health, nutritional, psycho-social; (4) actions extant and planned on behalf of young children; and (5) policy recommendations.

UNICEF. The Neglected Years: Early Childhood. New York: 1973. (1, 3)

A series of essays on the situation of children in developing countries, the potential role of day care, and an examination of Jamaica's early intervention program (PECE). The Spanish edition has an article by Carlos Castillo Ríos on Perú's national early intervention program, Initial Education.

UNICEF. Children and Adolescents in the Second Development Decade: Priorities for Planning and Action. New York: 1973. (1)

This report provides an outline of potential actions on behalf of young children to be taken by UNICEF and various governments during the seventies. It identifies priority problems and suggests actions to meet these problems. The report appears to be a policy statement working paper.

UNICEF. The Young Child: Approaches to Action in the Developing Countries. New York, 1974. (1)

A report examining the risks faced by young children in developing countries, the current situation of these young children, and the kinds of services needed to aid in meeting young children's needs. A general outline for young child policy is suggested.

UNICEF. Basic Services for Children in Developing Countries. Report by the Executive Director. New York, 1976

The report outlines the meaning and implications for action of "basic services", the provision of which has been urged as a priority by the U.N. General Assembly. This concept is the basis for much current U.N. action on behalf of young children and mothers, and is generally taken to mean (1) integrated programs; (2) community initiation and participation in all actions; (3) increased emphasis on the needs of rural women and children.

This integrated program emphasis-involving inter-sectoral cooperation of nutrition, health, educational, and social welfare sectors-- was adopted by UNICEF partly due to the overlapping and interacting nature of children's needs, and also because economic crises in many developing countries have reduced investment in programs for young children and women.

United Nations. Report on Children. New York: Department of Economic and Social Affairs, 1971 (1)

This report describes the situation of young children in developing countries in both quantitative and qualitative terms and examines action on behalf of children as of the early seventies.

Particularly interesting is a chapter on "preparing the child", which reviews literature on the processes of individual socialization and societal modernization,